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OM nucleic - nucleic search, using sw model

Run on: August 26, 2005, 12:31:55 ; Search time 2.8134 Seconds  
(without alignments)  
4.206 Million cell updates/sec

Title: US-09-598-982C-8

Perfect score: 771

Sequence: 1 gggccctcgagaaagaat.....cgtgaagcgccgcgcgt 771

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 0.5

Searched: 10 segs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 20 summaries

Database : US09598982C\_rev.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	771	100.0	771	1	US-09-598-982C-8
2	767.8	99.6	771	1	US-09-598-982C-22
3	766.2	99.4	771	1	US-09-598-982C-38
4	764.6	99.2	771	1	US-09-598-982C-20
5	763	99.0	771	1	US-09-598-982C-36
6	761.4	98.8	771	1	US-09-598-982C-24
7	761.4	98.8	771	1	US-09-598-982C-26
8	759.8	98.5	771	1	US-09-598-982C-40
9	759.8	98.5	771	1	US-09-598-982C-42
10	735	96.3	735	1	US-09-598-982C-10
11	28.2	3.7	771	1	US-09-598-982C-8
12	28.2	3.7	771	1	US-09-598-982C-20
13	28.2	3.7	771	1	US-09-598-982C-22
14	28.2	3.7	771	1	US-09-598-982C-24
15	28.2	3.7	771	1	US-09-598-982C-26
16	28.2	3.7	771	1	US-09-598-982C-36
17	28.2	3.7	771	1	US-09-598-982C-38
18	28.2	3.7	771	1	US-09-598-982C-40
19	28.2	3.7	771	1	US-09-598-982C-42
20	27.2	3.5	735	1	US-09-598-982C-10

ALIGNMENTS

RESULT 1  
US-09-598-982C-8  
; Sequence 8, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

TITLE OF INVENTION: AND METHODS OF MAKING SAME	
FILE REFERENCE: 34506.104	
CURRENT APPLICATION NUMBER: US/09/598,982C	
CURRENT FILING DATE: 2000-06-21	
PRIOR APPLICATION NUMBER: 09/079,970	
PRIOR FILING DATE: 1998-04-15	
NUMBER OF SEQ ID NOS: 52	
SOFTWARE: PatentIn version 3.3	
SEQ ID NO 8	
LENGTH: 771	
TYPE: DNA	
ORGANISM: Homo sapiens	
FEATURE:	
NAME/KEY: CDS	
LOCATION: (7)..(753)	
US-09-598-982C-8	
Query Match	
Best Local Similarity 100.0%; Score 771; DB 1; Length 771;	
Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	1 GGGCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCAGAGACAAATGGCCCTGG 60
DB	1 GGGCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCAGAGACAAATGGCCCTGG 60
QY	61 CAGGTGAGCCCTGAGAGTCCAGGCGCCATCTGATGACATCTTCCGGGGGCTCCCTCATC 120
DB	61 CAGGTGAGCCCTGAGAGTCCAGGCGCCATCTGATGACATCTTCCGGGGGCTCCCTCATC 120
QY	121 CACCCCAAGTGGTGTCTGACCGCAGCCACTGCTGTGGAGCCGACGTCAGAGATCTGGCC 180
DB	121 CACCCCAAGTGGTGTCTGACCGCAGCCACTGCTGTGGAGCCGACGTCAGAGATCTGGCC 180
QY	181 GCCTTCAGGGTGCACCTGCGGAGACAGACTTCTACTACCAAGACCAAGCTGCTGCGGTC 240
DB	181 GCCTTCAGGGTGCACCTGCGGAGACAGACTTCTACTACCAAGACCAAGCTGCTGCGGTC 240
QY	241 AGCAGATCATCTGTCACCCACAGCTTCTACACGCGCCAGATCGGAGGGAATGCGCCTG 300
DB	241 AGCAGATCATCTGTCACCCACAGCTTCTACACGCGCCAGATCGGAGGGAATGCGCCTG 300
QY	301 CTGAGTCTGAGAGAGCCGCTGAGAGTCTCCAGCCAGCTCCACGCTCACCTGCCCCCT 360
DB	301 CTGAGTCTGAGAGAGCCGCTGAGAGTCTCCAGCCAGCTCCACGCTCACCTGCCCCCT 360
QY	361 GCTTCAGAGACTTCCCCCGGGAGTCCGCTGCTGGGTCACTGCTGGGGGAGATGAGAC 420
DB	361 GCTTCAGAGACTTCCCCCGGGAGTCCGCTGCTGGGTCACTGCTGGGGGAGATGAGAC 420
QY	421 AATGATAGGCGCCCGACCGCCATTCTCTGAAAGAGAGTGAAGTCCCATTAATGAA 480
DB	421 AATGATAGGCGCCCGACCGCCATTCTCTGAAAGAGTGAAGTCCCATTAATGAA 480
QY	481 AACCACTTTGTGACGAAATATACCACTTGGCCCTTACACGAGAGACAGTCCGATC 540
DB	481 AACCACTTTGTGACGAAATATACCACTTGGCCCTTACACGAGAGACAGTCCGATC 540
QY	541 GTCCGTGACGACATGCTGTGTGTCGGGAGACACCCGAGGAGTATGCTACGAGGAGACTCC 600
DB	541 GTCCGTGACGACATGCTGTGTGTCGGGAGACACCCGAGGAGTATGCTACGAGGAGACTCC 600
QY	601 GGAAGGCGCCCTGGTGTGCAAGGTGATGGACCTGGCTGCAAGGCGGCGGTGTCAGCTGG 660
DB	601 GGAAGGCGCCCTGGTGTGCAAGGTGATGGACCTGGCTGCAAGGCGGCGGTGTCAGCTGG 660
QY	661 GCGAGGAGCTGTGTCAGCCCAACCGGCTGTGATCTACACCCGTGCACTACTACTTG 720
DB	661 GCGAGGAGCTGTGTCAGCCCAACCGGCTGTGATCTACACCCGTGCACTACTACTTG 720
QY	721 GACTGATCCACCACTATGTCCTCAAAAAGCGGTGAAGCGGCGCGCTCGT 771
DB	721 GACTGATCCACCACTATGTCCTCAAAAAGCGGTGAAGCGGCGCGCTCGT 771

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RESULT 2
US-09-598-982C-22
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafelt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22
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Query Match          99.6%; Score 767.8; DB 1; Length 771;
Best Local Similarity 99.7%; Pred. No. 0.038;
Matches 769; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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QY 1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGATCCACCGGCCCATCTGGATGCACTTTCGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGATCCACCGGCCCATCTGGATGCACTTTCGGGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGTGTGACCGGAGCACTGGTGGGACCGGACGCTCAAGATCTGGCC 180
DB 121 CACCCCAAGTGGTGTGACCGGAGCACTGGTGGGACCGGACGCTCAAGATCTGGCC 180
QY 181 GGCCTTGAAGGTGAATCTGGGGAGAGCACTTATCAAGAGCAAGTCTGCTCCGCTG 240
DB 181 GGCCTTGAAGGTGAATCTGGGGAGAGCACTTATCAAGAGCAAGTCTGCTCCGCTG 240
QY 241 AGCAGGATCATGTCGACCAAGTCTCAACCGCCAGATCGAGCGGACATCGCCCTG 300
DB 241 AGCAGGATCATGTCGACCAAGTCTCAACCGCCAGATCGAGCGGACATCGCCCTG 300
QY 301 CTGGAGCTGAGAGAGCCGGTGAAGTCTCCAGCCAGTCAACCGGTCAACCTGCCCCCT 360
DB 301 CTGGAGCTGAGAGAGCCGGTGAAGTCTCCAGCCAGTCAACCGGTCAACCTGCCCCCT 360
QY 361 GGCCTCAAGAGCTTCCCCCGGGAGTCCGTGTGGGTCACTGGCTGGGGCGATGTGAGC 420
DB 361 GGCCTCAAGAGCTTCCCCCGGGAGTCCGTGTGGGTCACTGGCTGGGGCGATGTGAGC 420
QY 421 AATGATGAGAGCTCCCAACCGCATTTCTCTGAACAGAGTGAAGGTCCCAATATGAGAA 480
DB 421 AATGATGAGAGCTCCCAACCGCATTTCTCTGAACAGAGTGAAGGTCCCAATATGAGAA 480
QY 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTTACACGGGAGACGACGTCCGCATC 540
DB 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTTACACGGGAGACGACGTCCGCATC 540
QY 541 GTCCGAGAGCACTGCTGTGTCCGGGAAACCCGGAGGAGCTCATGCCAGGGCGACTTC 600
DB 541 GTCCGAGAGCACTGCTGTGTCCGGGAAACCCGGAGGAGCTCATGCCAGGGCGACTTC 600
QY 601 GAGAGGCCCCGTGGTGTGCAAGGTGAATGGAACCTGGCTGAGAGCGGGCGGTGACGTGG 660
DB 601 GAGAGGCCCCGTGGTGTGCAAGGTGAATGGAACCTGGCTGAGAGCGGGCGGTGACGTGG 660
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QY 661 GAGAGGCGTGTGCCCAAGCCCAACCGGCTGGAATACACCCGNTCACTACTACTTG 720
DB 661 GAGAGGCGTGTGCCCAAGCCCAACCGGCTGGAATACACCCGNTCACTACTACTTG 720
QY 721 GACTGGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCCGCCCTGCT 771
DB 721 GACTGGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCCGCCCTGCT 771
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RESULT 3
US-09-598-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafelt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38
```

```
Query Match          99.4%; Score 766.2; DB 1; Length 771;
Best Local Similarity 99.6%; Pred. No. 0.038;
Matches 768; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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QY 1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGATCCACCGGCCCATCTGGATGCACTTTCGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGATCCACCGGCCCATCTGGATGCACTTTCGGGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGTGTGACCGGAGCACTGGTGGGACCGGACGCTCAAGATCTGGCC 180
DB 121 CACCCCAAGTGGTGTGACCGGAGCACTGGTGGGACCGGACGCTCAAGATCTGGCC 180
QY 181 GGCCTTGAAGGTGAATCTGGGGAGAGCACTTATCAAGAGCAAGTCTGCTCCGCTG 240
DB 181 GGCCTTGAAGGTGAATCTGGGGAGAGCACTTATCAAGAGCAAGTCTGCTCCGCTG 240
QY 241 AGCAGGATCATGTCGACCAAGTCTCAACCGCCAGATCGAGCGGACATGCGCTG 300
DB 241 AGCAGGATCATGTCGACCAAGTCTCAACCGCCAGATCGAGCGGACATGCGCTG 300
QY 301 CTGGAGCTGAGAGAGCCGGTGAAGTCTCCAGCCAGTCAACCGGTCAACCGTCCGCCCT 360
DB 301 CTGGAGCTGAGAGAGCCGGTGAAGTCTCCAGCCAGTCAACCGGTCAACCGTCCGCCCT 360
QY 361 GGCCTCAAGAGCTTCCCCCGGGAGTCCGTGTGGGTCACTGGCTGGGGCGATGTGAGC 420
DB 361 GGCCTCAAGAGCTTCCCCCGGGAGTCCGTGTGGGTCACTGGCTGGGGCGATGTGAGC 420
QY 421 AATGATGAGAGCTCCCAACCGCATTTCTCTGAAGAGGTGAAGTCCCAATATGAGAA 480
DB 421 AATGATGAGAGCTCCCAACCGCATTTCTCTGAAGAGGTGAAGTCCCAATATGAGAA 480
QY 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTTACACGGGAGACGACGTCCGCATC 540
DB 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTTACACGGGAGACGACGTCCGCATC 540
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QY 241 AGCAGGATCATGTGTGACCCCAAGTTCTAACCAGCCAGATGGAGCGGACATCGCCCTG 300
|
|
|
Db 241 AGCAGGATCATGTGTGACCCCAAGTTCTAACCAGCCAGATGGAGCGGACATCGCCCTG 300
|
|
|
QY 301 CTGGAGCTGGAAGAGCGGAGTGAAGTCTCAGCCACGTCACACAGGTCACCCGCGCCCT 360
|
|
|
Db 301 CTGGAGCTGGAAGAGCGGAGTGAAGTCTCAGCCACGTCACACAGGTCACCCGCGCCCT 360
|
|
|
QY 361 GCCTCAGAGACCTTCCCGCGGAGATCCGTGCTGGGTCACTGGCTGGGAGCATGTGAGAC 420
|
|
|
Db 361 GCCTCAGAGACCTTCCCGCGGAGATCCGTGCTGGGTCACTGGCTGGGAGCATGTGAGAC 420
|
|
|
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGACAGTGAAGTCCCCATTAATGAA 480
|
|
|
Db 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGACAGTGAAGTCCCCATTAATGAA 480
|
|
|
QY 481 AACCAATTTGTGACGCAAAATACGACTTGGCGCTTACACGGGAGACGACGTCGCGCATC 540
|
|
|
Db 481 AACCAATTTGTGACGCAAAATACGACTTGGCGCTTACACGGGAGACGACGTCGCGCATC 540
|
|
|
QY 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCGAGGAGCATCATGCGAGGCGACTCC 600
|
|
|
Db 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCGAGGAGCATCATGCGAGGCGACTCC 600
|
|
|
QY 601 GGAAGGCCCCCTGTGTGTCAGAGTGAATGGCACTGGCTGCAAGCGGCGTGGTCACTG 660
|
|
|
Db 601 GGAAGGCCCCCTGTGTGTCAGAGTGAATGGCACTGGCTGCAAGCGGCGTGGTCACTG 660
|
|
|
QY 661 GGGGAGGGCTGTGTCAGAGCCCAACCGGCGTGGCATCTACACCGGTGCACTTACTT 720
|
|
|
Db 661 GGGGAGGGCTGTGTCAGAGCCCAACCGGCGTGGCATCTACACCGGTGCACTTACTT 720
|
|
|
QY 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGTGTGT 771
|
|
|
Db 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGTGTGT 771
|
|
|

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RESULT 6
US-09-598-982C-24
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24

```

```

Query Match 98.8%; Score 761.4; DB 1; Length 771;
Best Local Similarity 99.2%; Pred. No. 0.04;
Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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QY 1 GGGCCCCCTGGAAGAAATCGTCGGGGGTCAAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
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|
Db 1 GGGCCCCCTGGAAGAAATCGTCGGGGGTCAAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
|
|
|
QY 61 CAGGTAGCCTGAGATCCACGAGCCCATCTGATGCACTTGTGCGGGGATCCCTCATC 120
|
|
|
Db 61 CAGGTAGCCTGAGATCCACGAGCCCATCTGATGCACTTGTGCGGGGATCCCTCATC 120
|
|
|

```

```

QY 121 CACCCCAAGTGGGTGTGACCGGACGCGCATGTGCGGACCGGACGTCAGAGATCTGGCC 180
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|
|
Db 121 CACCCCAAGTGGGTGTGACCGGACGCGCATGTGCGGACCGGACGTCAGAGATCTGGCC 180
|
|
|
QY 181 GCCCTCAGGGTGCACATCGGAGAGACGCACTCTACTACAGAGACCAAGCTGTGCGGTC 240
|
|
|
Db 181 GCCCTCAGGGTGCACATCGGAGAGACGCACTCTACTACAGAGACCAAGCTGTGCGGTC 240
|
|
|
QY 241 AGCAGGATCATGTGTGACCCCAAGTTCTAACCAGCCAGATGGAGCGGACATCGCCCTG 300
|
|
|
Db 241 AGCAGGATCATGTGTGACCCCAAGTTCTAACCAGCCAGATGGAGCGGACATCGCCCTG 300
|
|
|
QY 301 CTGGAGCTGGAAGAGCGGAGTGAAGTCTTCAAGCCACGTCACACAGGTCACTCGCCCT 360
|
|
|
Db 301 CTGGAGCTGGAAGAGCGGAGTGAAGTCTTCAAGCCACGTCACACAGGTCACTCGCCCT 360
|
|
|
QY 361 GCCTCAGAGACCTTCCCGCGGAGATCCGTGCTGGGTCACTGGCTGGGAGCATGTGAGAC 420
|
|
|
Db 361 GCCTCAGAGACCTTCCCGCGGAGATCCGTGCTGGGTCACTGGCTGGGAGCATGTGAGAC 420
|
|
|
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGACAGTGAAGTCCCATTAATGAA 480
|
|
|
Db 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGACAGTGAAGTCCCATTAATGAA 480
|
|
|
QY 481 AACCAATTTGTGACGCAAAATACGACTTGGCGCTTACACGGGAGACGACGTCGCGCATC 540
|
|
|
Db 481 AACCAATTTGTGACGCAAAATACGACTTGGCGCTTACACGGGAGACGACGTCGCGCATC 540
|
|
|
QY 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCGAGGAGCATCATGCGAGGCGACTCC 600
|
|
|
Db 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCGAGGAGCATCATGCGAGGCGACTCC 600
|
|
|
QY 601 GGAAGGCCCCCTGTGTGTCAGAGTGAATGGCACTGGCTGCAAGCGGCGTGGTCACTG 660
|
|
|
Db 601 GGAAGGCCCCCTGTGTGTCAGAGTGAATGGCACTGGCTGCAAGCGGCGTGGTCACTG 660
|
|
|
QY 661 GGGGAGGGCTGTGTCAGAGCCCAACCGGCGTGGCATCTACACCGGTGCACTTACTT 720
|
|
|
Db 661 GGGGAGGGCTGTGTCAGAGCCCAACCGGCGTGGCATCTACACCGGTGCACTTACTT 720
|
|
|
QY 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGTGTGT 771
|
|
|
Db 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGTGTGT 771
|
|
|

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```

RESULT 7
US-09-598-982C-26
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

```

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Query Match 98.8%; Score 761.4; DB 1; Length 771;
Best Local Similarity 99.2%; Pred. No. 0.04;

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Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 1 GGGCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGAGTCCACGCGCCCACTGAGTGCATTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGAGTCCACGCGCCCACTGAGTGCATTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGGTCTGACCGCAGCGCACTGCGGAGACCGGACGTCAGAGATCTGGCC 180
DB 121 CACCCCAAGTGGGTCTGACCGCAGCGCACTGCGGAGACCGGACGTCAGAGATCTGGCC 180
QY 181 GCGCTCAGGGTGAAGTCCGCGGAGACGACCTCTACTACAGAGACCACTGCGGCTC 240
DB 181 GCGCTCAGGGTGAAGTCCGCGGAGACGACCTCTACTACAGAGACCACTGCGGCTC 240
QY 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGGAGGAGCCCTG 300
DB 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGGAGGAGCCCTG 300
QY 301 CTGAGAGCTGAGAGACCGGTGAAGTCTCAGCCACGTCACACGCTCACTGCGCCCT 360
DB 301 CTGAGAGCTGAGAGACCGGTGAAGTCTCAGCCACGTCACACGCTCACTGCGCCCT 360
QY 361 GCGTCAGAGACCTTCCCGCGGAGATCGTCTGAGTCACTGCGGGGCGATGTGAC 420
DB 361 GCGTCAGAGACCTTCCCGCGGAGATCGTCTGAGTCACTGCGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGGCACTTCTCTGAGAGAGTGAAGTCCCATATATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGGCACTTCTCTGAGAGAGTGAAGTCCCATATATGAA 480
QY 481 AACCACTTTGTGAGCGAAATATACACCTTGCGGCTCAACGAGAGACGATCCGCAATC 540
DB 481 AACCACTTTGTGAGCGAAATATACACCTTGCGGCTCAACGAGAGACGATCCGCAATC 540
QY 541 GTCCGTGACGACATCTGTGTGCGGAGAACCGCGAGAGGACTCATGCGAGGCGATCC 600
DB 541 GTCCGTGACGACATCTGTGTGCGGAGAACCGCGAGAGGACTCATGCGAGGCGATCC 600
QY 601 GCGGAGCGCTGTGTGAGAGGTGATGACCTGCTGAGCGGCGGGGTGCTGAGCTGG 660
DB 601 GCGGAGCGCTGTGTGAGAGGTGATGACCTGCTGAGCGGCGGGGTGCTGAGCTGG 660
QY 661 GCGGAGCGCTGTGCGCAGCGCAACCGGCTGACATCAACCGGTGCACTACTACTTG 720
DB 661 GCGGAGCGCTGTGCGCAGCGCAACCGGCTGACATCAACCGGTGCACTACTACTTG 720
QY 721 GACTGATCCACCACTATGTGCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
DB 721 GACTGATCCACCACTATGTGCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
RESULT 8
US-09-598-982C-40
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
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TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (7)..(753)
US-09-598-982C-40
Query Match 98.5%; Score 759.8; DB 1; Length 771;
Best Local Similarity 99.1%; Pred. No. 0.04;
Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 1 GGGCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGAGTCCACGCGCCCACTGAGTGCATTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGAGTCCACGCGCCCACTGAGTGCATTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGGTCTGACCGCAGCGCACTGCGGAGACCGGACGTCAGAGATCTGGCC 180
DB 121 CACCCCAAGTGGGTCTGACCGCAGCGCACTGCGGAGACCGGACGTCAGAGATCTGGCC 180
QY 181 GCGCTCAGGGTGAAGTCCGCGGAGACGACCTCTACTACAGAGACCACTGCGGCTC 240
DB 181 GCGCTCAGGGTGAAGTCCGCGGAGACGACCTCTACTACAGAGACCACTGCGGCTC 240
QY 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGGAGGAGCCCTG 300
DB 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGGAGGAGCCCTG 300
QY 301 CTGAGAGCTGAGAGACCGGTGAAGTCTCAGCCACGTCACACGCTCACTGCGCCCT 360
DB 301 CTGAGAGCTGAGAGACCGGTGAAGTCTCAGCCACGTCACACGCTCACTGCGCCCT 360
QY 361 GCGTCAGAGACCTTCCCGCGGAGATCGTCTGAGTCACTGCGGGGCGATGTGAC 420
DB 361 GCGTCAGAGACCTTCCCGCGGAGATCGTCTGAGTCACTGCGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGGCACTTCTCTGAGAGAGTGAAGTCCCATATATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGGCACTTCTCTGAGAGAGTGAAGTCCCATATATGAA 480
QY 481 AACCACTTTGTGAGCGAAATATACACCTTGCGGCTCAACGAGAGACGATCCGCAATC 540
DB 481 AACCACTTTGTGAGCGAAATATACACCTTGCGGCTCAACGAGAGACGATCCGCAATC 540
QY 541 GTCCGTGACGACATCTGTGTGCGGAGAACCGCGAGAGGACTCATGCGAGGCGATCC 600
DB 541 GTCCGTGACGACATCTGTGTGCGGAGAACCGCGAGAGGACTCATGCGAGGCGATCC 600
QY 601 GCGGAGCGCTGTGTGAGAGGTGATGACCTGCTGAGCGGCGGGGTGCTGAGCTGG 660
DB 601 GCGGAGCGCTGTGTGAGAGGTGATGACCTGCTGAGCGGCGGGGTGCTGAGCTGG 660
QY 661 GCGGAGCGCTGTGCGCAGCGCAACCGGCTGACATCAACCGGTGCACTACTACTTG 720
DB 661 GCGGAGCGCTGTGCGCAGCGCAACCGGCTGACATCAACCGGTGCACTACTACTTG 720
QY 721 GACTGATCCACCACTATGTGCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
DB 721 GACTGATCCACCACTATGTGCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
RESULT 9
US-09-598-982C-42
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
```

```
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 42
/ LENGTH: 771
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (7)..(753)
/ US-09-598-982C-42
```

```
Query Match      98.5%; Score 759.8; DB 1; Length 771;
Best Local Similarity 99.1%; Pred. No. 0.04; Indels 0; Gaps 0;
Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCCCTGAGAAAAGAAATCGTCGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTGAGAAAAGAAATCGTCGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCTTGAGATCCAGCGCCCATACTGAGATCACTTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAGATCCAGCGCCCATACTGAGATCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGTGACCGGAGGCACTGGTGGGACCGGACGTCAAGGATCTGGGC 180
DB 121 CACCCCGAGTGGGTGTGACCGGAGGCACTGGTGGGACCGGACGTCAAGGATCTGGGC 180
QY 181 GCCCTCAGGGGTGCAACTGCGGGAGCAGCACTCTACTACAGAGCAGCTGTCGGCGTTC 240
DB 181 GCCCTCAGGGGTGCAACTGCGGGAGCAGCACTCTACTACAGAGCAGCTGTCGGCGTTC 240
QY 241 AGCAGATCATGTGTGACCCCAAGTTCTACCGCCCAAGTGGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGTGACCCCAAGTTCTACCGCCCAAGTGGAGCGGACATCGCCCTG 300
QY 301 CTGGAGCTGAGAGGCGGGTGAAGGTCTCAGGCACTGTCACACGGGTCACTCCGCCCCCT 360
DB 301 CTGGAGCTGAGAGGCGGGTGAAGGTCTCAGGCACTGTCACACGGGTCACTCCGCCCCCT 360
QY 361 GCCTCAGAGACTTCCCGCGGGAGTCCGTGCTGGGTCACTGAGGCGCATGTGAC 420
DB 361 GCCTCAGAGACTTCCCGCGGGAGTCCGTGCTGGGTCACTGAGGCGCATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAAGAGTGAAGTCCCCATAATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAAGAGTGAAGTCCCCATAATGAA 480
QY 481 AACCACTTTGAGCGCAAAATACACCTTGGGCTTACACGGGAGACGACGTCCGCATC 540
DB 481 AACCACTTTGAGCGCAAAATACACCTTGGGCTTACACGGGAGACGACGTCCGCATC 540
QY 541 GTCCGTGACGACATGCTGTGTGTGCGGGAAACCCCGAGGGAATCATGCCAGGCGCACTTC 600
DB 541 GTCCGTGACGACATGCTGTGTGTGCGGGAAACCCCGAGGGAATCATGCCAGGCGCACTTC 600
QY 601 GGAAGGCGCTGTGTGTGCAAGGTGAATGGCACTGCTGCAAGCGGGCGTGTCACTGG 660
DB 601 GGAAGGCGCTGTGTGTGCAAGGTGAATGGCACTGCTGCAAGCGGGCGTGTCACTGG 660
QY 661 GGGAGAGGCTGTGTGTGCAAGCGGCAACCGGCTGGCATTTACACCGGTGTCACTTACTTG 720
DB 661 GGGAGAGGCTGTGTGTGCAAGCGGCAACCGGCTGGCATTTACACCGGTGTCACTTACTTG 720
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGCGCGCTGTGT 771
DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGCGCGCTGTGT 771
```

```
RESULT 10
US-09-598-982C-10
/ Sequence 10, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Miles, Andrew
/ APPLICANT: Maffitt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ PRIOR FILING DATE: 2000-06-21
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 10
/ LENGTH: 735
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (1)..(735)
/ US-09-598-982C-10
```

```
Query Match      95.3%; Score 735; DB 1; Length 735;
Best Local Similarity 100.0%; Pred. No. 0.054;
Matches 735; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 19 ATCTCGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGGAGGAGCTTGAAGTCT 78
DB 1 ATCTCGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGGAGGAGCTTGAAGTCT 78
QY 79 CAGGCGCATACTGGATGCACTTCTGCGGGGGCTCCCTCATCCACCCCAATGGGTGCTG 138
DB 61 CAGGCGCATACTGGATGCACTTCTGCGGGGGCTCCCTCATCCACCCCAATGGGTGCTG 120
QY 139 ACCGAGGCACTGCTGGGAGCCGACGTCAAGGATCTGGCGCCCTCAGGGTCAACTG 198
DB 121 ACCGAGGCACTGCTGGGAGCCGACGTCAAGGATCTGGCGCCCTCAGGGTCAACTG 180
QY 199 CGGAGAGCACTCTACTACAGAGCAAGTGTGCGCGGTCAAGAGATCATGTGAC 258
DB 191 CGGAGAGCACTCTACTACAGAGCAAGTGTGCGCGGTCAAGAGATCATGTGAC 240
QY 259 CCACAGTTCTACACCGCCAGATGAGCGGACATCGCCTCTGAGCTGAGAGCG 318
DB 241 CCACAGTTCTACACCGCCAGATGAGCGGACATCGCCTCTGAGCTGAGAGCG 300
QY 319 GTGAAGTCTCAGGCACTGTCACCGGTCACTGCTGCTGCTGAGAGCTTCCCT 378
DB 301 GTGAAGTCTCAGGCACTGTCACCGGTCACTGCTGCTGCTGAGAGCTTCCCT 360
QY 379 CGGGGATGCGGTGTGAGTCACTGGTGGGGGAGTGGGCAATGATGAGCGCTCCA 438
DB 361 CGGGGATGCGGTGTGAGTCACTGGTGGGGGAGTGGGCAATGATGAGCGCTCCA 420
QY 439 CGGCATTTCTCTGAGAGCAAGTATCCCAATAATGAAAACCACTTTGTGACGA 498
DB 421 CGGCATTTCTCTGAGAGCAAGTATCCCAATAATGAAAACCACTTTGTGACGA 480
QY 499 AAATACACCTTGGGCTTACACGGAGACGACGTCCGATGTCTCGTACGACATGCTG 558
DB 481 AAATACACCTTGGGCTTACACGGAGACGACGTCCGATGTCTCGTACGACATGCTG 540
QY 559 TGTGCGGGGACACCCCGAGGACCTCATGCAAGGCGCATTCGAGAGGCGCCCTGTGTC 618
DB 541 TGTGCGGGGACACCCCGAGGACCTCATGCAAGGCGCATTCGAGAGGCGCCCTGTGTC 600
QY 619 AAGTGAATGCACTGCTGCAAGCGGGCGTGTGCTGAGCTGGGGCGAGGGCTGTGCCAG 678
DB 601 AAGTGAATGCACTGCTGCAAGCGGGCGTGTGCTGAGCTGGGGCGAGGGCTGTGCCAG 660
```

Oy 679 CCAACGGCCCTGGATCTAGACCCGATGCACTTACTTGGATGATCCACCACTAT 738  
 |||||  
 Db 661 CCAACGGCCCTGGATCTAGACCCGATGCACTTACTTGGATGATCCACCACTAT 720  
 |||||

Oy 739 GTCCCAAAAAGCCG 753  
 |||||  
 Db 721 GTCCCAAAAAGCCG 735

RESULT 11  
 US-09-598-982C-8/c  
 ; Sequence 8, Application US/09598982C  
 ; GENERAL INFORMATION:

APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 8  
 LENGTH: 771  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (7)..(753)  
 US-09-598-982C-8

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
 |||||  
 Db 113 GAGCCCCCGAGAAAGTGCATCAGTATGAGCCGCGTGAATCTCAGGCTCAGCCGAGGCG 54  
 |||||

Oy 61 CAGGTGAGCTGAGAGTCCACGCGCCCACTGATGCACTTCTCGGGGGCTC 113  
 |||||  
 Db 53 CACTTGCTCTGGGGGCTCTGACCCCGAGCAATCTTTTCTCGAGGGGCCC 1

RESULT 12  
 US-09-598-982C-20/c

; Sequence 20, Application US/09598982C  
 ; GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 20  
 LENGTH: 771  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (7)..(753)  
 US-09-598-982C-20

Query Match 3.7%; Score 28.2; DB 1; Length 771;

Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
 |||||  
 Db 113 GAGCCCCCGAGAAAGTGCATCAGTATGAGCCGCGTGAATCTCAGGCTCAGCCGAGGCG 54  
 |||||

Oy 61 CAGGTGAGCTGAGAGTCCACGCGCCCACTGATGCACTTCTCGGGGGCTC 113  
 |||||  
 Db 53 CACTTGCTCTGGGGGCTCTGACCCCGAGCAATCTTTTCTCGAGGGGCCC 1

RESULT 13

US-09-598-982C-22/c  
 ; Sequence 22, Application US/09598982C  
 ; GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 22  
 LENGTH: 771  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (7)..(753)  
 US-09-598-982C-22

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
 |||||  
 Db 113 GAGCCCCCGAGAAAGTGCATCAGTATGAGCCGCGTGAATCTCAGGCTCAGCCGAGGCG 54  
 |||||

Oy 61 CAGGTGAGCTGAGAGTCCACGCGCCCACTGATGCACTTCTCGGGGGCTC 113  
 |||||  
 Db 53 CACTTGCTCTGGGGGCTCTGACCCCGAGCAATCTTTTCTCGAGGGGCCC 1

RESULT 14

US-09-598-982C-24/c  
 ; Sequence 24, Application US/09598982C  
 ; GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 24  
 LENGTH: 771  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (7)..(753)

US-09-598-982C-24

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTGAGAGAGCCCCCAGAGCAAGTGGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGACTCTCAGGCTCACTGCCAGGGC 54  
 QY 61 CAGGTAGCCTGAGAGTCCACGGCCCATACTGGATGCACCTTCGCGGGGCTC 113  
 DB 53 CACTTGCTCTCGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGCC 1

RESULT 15

US-09-598-982C-26/c

; Sequence 26, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendescho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 26  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-26

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTGAGAGAGCCCCCAGAGCAAGTGGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGACTCTCAGGCTCACTGCCAGGGC 54  
 QY 61 CAGGTAGCCTGAGAGTCCACGGCCCATACTGGATGCACCTTCGCGGGGCTC 113  
 DB 53 CACTTGCTCTCGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGCC 1

RESULT 16

US-09-598-982C-36/c

; Sequence 36, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendescho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 36  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens

; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-36

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTGAGAGAGCCCCCAGAGCAAGTGGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGACTCTCAGGCTCACTGCCAGGGC 54  
 QY 61 CAGGTAGCCTGAGAGTCCACGGCCCATACTGGATGCACCTTCGCGGGGCTC 113  
 DB 53 CACTTGCTCTCGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGCC 1

RESULT 17

US-09-598-982C-38/c

; Sequence 38, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendescho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 38  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-38

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTGAGAGAGCCCCCAGAGCAAGTGGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGACTCTCAGGCTCACTGCCAGGGC 54  
 QY 61 CAGGTAGCCTGAGAGTCCACGGCCCATACTGGATGCACCTTCGCGGGGCTC 113  
 DB 53 CACTTGCTCTCGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGCC 1

RESULT 18

US-09-598-982C-40/c

; Sequence 40, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendescho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 40

```

; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Oy 1 GGGCCCCCGAGAAAGATGTCGGGGGTGAGAGAGCCCGGAGAGAGTGGCCCTGG 60
Db 113 GAGCCCCCGGAGAGATGATCAGATGAGCGCGTGGACTTCAGGCTCAGCCAGGAG 54
Oy 61 CAGGTGACCTGAGAGTCCAGCGCCCATATGATGACATTCCTGGGGGGCTGC 113
Db 53 CACTTGCTCTGGGGGGCTCTGAGACCCCGAGAGATTTCTTCTGAGGGGGCC 1

```

```

RESULT 19
US-09-598-982C-42/c
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Miles, Andrew
; APPLICANT: Mafilet, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Oy 1 GGGCCCCCGAGAAAGATGTCGGGGGTGAGAGAGCCCGGAGAGAGTGGCCCTGG 60
Db 113 GAGCCCCCGGAGAGATGATCAGATGAGCGCGTGGACTTCAGGCTCAGCCAGGAG 54
Oy 61 CAGGTGACCTGAGAGTCCAGCGCCCATATGATGACATTCCTGGGGGGCTGC 113
Db 53 CACTTGCTCTGGGGGGCTCTGAGACCCCGAGAGATTTCTTCTGAGGGGGCC 1

```

```

RESULT 20
US-09-598-982C-10/c
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Miles, Andrew
; APPLICANT: Mafilet, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15

```

```

; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

```

```

Query Match      3.5%; Score 27.2; DB 1; Length 735;
Best Local Similarity 52.9%; Pred. No. 18;
Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

```

```

Oy 286 GCGGACATCGCCCTGCTGAGAGTGGAGAGCCGTTGAAGTCTTCACGACGTCACAG 345
Db 453 GGGGACCTTCACCTGCTTCAGAGGAAATGGCGGTGGAGGCGCTCATTTGTCACA-- 396
Oy 346 GTCAACCTGCCCCCTGCTGAGAGACCTTCCCCCGGGGAATGCCGTGGGTCACTGGC 405
Db 395 -TCGCCCGACGAGTACCCAGACGCGCATCCCGGGGGAAGTCTCTGAGGAGGGG 337
Oy 406 TGGGGCGA---TGTGACAAATGATGAGCGCTCCACCGCATTTCTTGAAGCAGGTG 462
Db 336 CAGGTGACGCTGTGAGAGCTGCTGAGAGACCTTCAACGGGCTCTTCAGCTCAGCAGG 277
Oy 463 AAGTCCCC 471
Db 276 GATGTCCGC 268

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Search completed: August 26, 2005, 12:32:25
Job time : 3.81314 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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Run on: August 26, 2005, 12:31:55 ; Search time 2.68178 Seconds
          (without alignments)
          4.206 Million cell updates/sec

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```

Title: US-09-598-982C-10
Perfect score: 735
Sequence: 1 atcgctcg999gtcag9agc.....acctatgtcccaaaagcgc 735

```

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Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 0.5

```

Searched: 10 seqs, 7674 residues

Total number of hits satisfying chosen parameters: 20

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Minimum DB seq length: 0
Maximum DB seq length: Inf

```

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Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 20 summaries

```

Database : US09598982C.rev.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Query Length	DB ID	Description
SUMMARIES					

```

-----
1 735 100.0 735 1 US-09-598-982C-10 Sequence 10, Appl
2 735 100.0 771 1 US-09-598-982C-8 Sequence 8, Appl
3 731.8 99.6 771 1 US-09-598-982C-22 Sequence 22, Appl
4 730.2 99.3 771 1 US-09-598-982C-38 Sequence 38, Appl
5 728.6 99.1 771 1 US-09-598-982C-20 Sequence 20, Appl
6 727 98.9 771 1 US-09-598-982C-36 Sequence 36, Appl
7 725.4 98.7 771 1 US-09-598-982C-24 Sequence 24, Appl
8 725.4 98.7 771 1 US-09-598-982C-26 Sequence 26, Appl
9 723.8 98.5 771 1 US-09-598-982C-40 Sequence 40, Appl
10 723.8 98.5 771 1 US-09-598-982C-42 Sequence 42, Appl
11 27.6 3.8 771 1 US-09-598-982C-20 Sequence 20, Appl
12 27.6 3.8 771 1 US-09-598-982C-36 Sequence 36, Appl
13 27.2 3.7 735 1 US-09-598-982C-10 Sequence 10, Appl
14 27.2 3.7 771 1 US-09-598-982C-8 Sequence 8, Appl
15 27.2 3.7 771 1 US-09-598-982C-24 Sequence 24, Appl
16 27.2 3.7 771 1 US-09-598-982C-26 Sequence 26, Appl
17 25.6 3.5 771 1 US-09-598-982C-40 Sequence 40, Appl
18 25.6 3.5 771 1 US-09-598-982C-42 Sequence 42, Appl
19 24.2 3.3 771 1 US-09-598-982C-22 Sequence 22, Appl
20 22.8 3.1 771 1 US-09-598-982C-38 Sequence 38, Appl

```

## ALIGNMENTS

```

RESULT 1
US-09-598-982C-10
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

```

```

Query Match          100.0%; Score 735; DB 1; Length 735;
Best Local Similarity 100.0%; Pred. No. 0.055;
Matches 735; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

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QY 1 ATGTCGCGGGGTACAGAGGCCCCCAGAGCAAGTGGCCCTGCGAGGTGAGCTTGAGATC 60
DB 1 ATGTCGCGGGGTACAGAGGCCCCCAGAGCAAGTGGCCCTGCGAGGTGAGCTTGAGATC 60
QY 61 CACGGCCCATCTGATGAGCACTTCTGCGGGGCTCCCTATCCACCCCAAGTGGGCTG 120
DB 61 CACGGCCCATCTGATGAGCACTTCTGCGGGGCTCCCTATCCACCCCAAGTGGGCTG 120
QY 121 ACCGAGCGCAGCTGCGTGGAGCCGAGCGTCAAGAGATCTGGCCGCTTCAGGGTGAAC 180
DB 121 ACCGAGCGCAGCTGCGTGGAGCCGAGCGTCAAGAGATCTGGCCGCTTCAGGGTGAAC 180
QY 181 CCGGAGCAGACCTCTACTACCAAGACCAAGCTGCTGCGGTGACAGAGATCATCTGTGAC 240
DB 181 CCGGAGCAGACCTCTACTACCAAGACCAAGCTGCTGCGGTGACAGAGATCATCTGTGAC 240
QY 241 CACAGTTTACACGGCCAGATCGGAGGGAATCGCCCTGTGAGAGTGAAGGACCG 300
DB 241 CACAGTTTACACGGCCAGATCGGAGGGAATCGCCCTGTGAGAGTGAAGGACCG 300

```

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DB 241 CCACAGTTCTACACCGCCAGATCGAGCGGACATTCGCCCTGCTGAGACTGAGAGACCG 300
QY 301 GTGAAGTCTCTACAGCAGTCCACACGATCAACCTGCCCCCTGCTCAGACCTTCCCC 360
DB 301 GTGAAGTCTCTACAGCAGTCCACACGATCAACCTGCCCCCTGCTCAGACCTTCCCC 360
QY 361 CCGGGAGATGCGGTGCTGATCACTGCGTGGGCGATGTGACAAATGATGAGCGCTTCCA 420
DB 361 CCGGGAGATGCGGTGCTGATCACTGCGTGGGCGATGTGACAAATGATGAGCGCTTCCA 420
QY 421 CCGCATTTCTCTGAAAGCAGATGAGGTCCCAATATGAAAAACCAATTGTGACGA 480
DB 421 CCGCATTTCTCTGAAAGCAGATGAGGTCCCAATATGAAAAACCAATTGTGACGA 480
QY 481 AAATACCACTTGGGCGCTTACACGAGACGACGTCCGATCGTCCGTGACGATGCTG 540
DB 481 AAATACCACTTGGGCGCTTACACGAGAGACGACGTCCGATCGTCCGTGACGATGCTG 540
QY 541 TGTGCGGGAAACACCCGAGGAGTCAATGCGCAGAGGCGACTCCGAGGGCCCTGTGTGC 600
DB 541 TGTGCGGGAAACACCCGAGGAGTCAATGCGCAGAGGCGACTCCGAGGGCCCTGTGTGC 600
QY 601 AAGTGAATGACACTGCTGCTGAGCGGGCGTGTGACGCTGAGGGCGAGGCTGTGCCAG 660
DB 601 AAGTGAATGACACTGCTGCTGAGCGGGCGTGTGACGCTGAGGGCGAGGCTGTGCCAG 660
QY 661 CCACACCGGCTGAGATCTACACCGGTGTCACTTACTTGTGACTGATCACCACATAT 720
DB 661 CCACACCGGCTGAGATCTACACCGGTGTCACTTACTTGTGACTGATCACCACATAT 720
QY 721 GTCCCAAAAAACCG 735
DB 721 GTCCCAAAAAACCG 735

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```

RESULT 2
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-8

```

```

Query Match          100.0%; Score 735; DB 1; Length 771;
Best Local Similarity 100.0%; Pred. No. 0.053;
Matches 735; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGTCGCGGGGTACAGAGGCCCCCAGAGCAAGTGGCCCTGCGAGGTGAGCTTGAGATC 60
DB 19 ATGTCGCGGGGTACAGAGGCCCCCAGAGCAAGTGGCCCTGCGAGGTGAGCTTGAGATC 78
QY 61 CACGGCCCATCTGATGAGCACTTCTGCGGGGCTCCCTATCCACCCCAAGTGGGCTG 120
DB 79 CACGGCCCATCTGATGAGCACTTCTGCGGGGCTCCCTATCCACCCCAAGTGGGCTG 138
QY 121 ACCGAGCGCAGCTGCGTGGAGCCGAGCGTCAAGAGATCTGGCCGCTTCAGGGTGAAC 180
DB 121 ACCGAGCGCAGCTGCGTGGAGCCGAGCGTCAAGAGATCTGGCCGCTTCAGGGTGAAC 180

```

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Db 139 ACCGAGGCACTGCTGGAGACCGACCTCAAGGATCTGGCGGCCCTCAGGGTGCATCTG 198
Qy 181 CGGAGCAGCACTCTACTACAGAGCAGCTGCTCGCGGTACAGAGATCATCTGTGCAC 240
Db 199 CGGAGCAGCACTCTACTACAGAGCAGCTGCTCGCGGTACAGAGATCATCTGTGCAC 258
Qy 241 CCAAGTTCTACACCGCCCAAGATCGGAGCGACATCGCCCTGCTGGAGACTGGAGAGCG 300
Db 259 CCAAGTTCTACACCGCCCAAGATCGGAGCGACATCGCCCTGCTGGAGACTGGAGAGCG 318
Qy 301 GTGAAGTCTCCAGCAGCAGTCCACACCGGTCACTGCGCCCTGCTGAGAGACTTTCCCC 360
Db 319 GTGAAGTCTCCAGCAGCAGTCCACACCGGTCACTGCGCCCTGCTGAGAGACTTTCCCC 378
Qy 361 CGGGGATGCCGTGTGGGTCACTGGCTGGGGCAGTGTGAACAATGATGAGCGCTCCCA 420
Db 379 CGGGGATGCCGTGTGGGTCACTGGCTGGGGCAGTGTGAACAATGATGAGCGCTCCCA 438
Qy 421 CGGCATTCTCTGAGACGAGTGAAGTCCCATATGGAACCAACATTTGTGACGCA 480
Db 439 CGGCATTCTCTGAGACGAGTGAAGTCCCATATGGAACCAACATTTGTGACGCA 498
Qy 481 AAATACACCTTGGGCGCTTACACGGGAGACGACGTCCGATGTCTCGTGAACAATGCTG 540
Db 499 AAATACACCTTGGGCGCTTACACGGGAGACGACGTCCGATGTCTCGTGAACAATGCTG 558
Qy 541 TGTGCGGGAAACACCGGAGGAGCTCATGTCCAGGGGCACTCCGAGGGGCCCTGTGTGC 600
Db 559 TGTGCGGGAAACACCGGAGGAGCTCATGTCCAGGGGCACTCCGAGGGGCCCTGTGTGC 618
Qy 601 AAGTGAAATGCACTGTGCTGAGGCGCGGTGTCACTGTGGGGGAGAGGCTGTGCCAG 660
Db 619 AAGTGAAATGCACTGTGCTGAGGCGCGGTGTCACTGTGGGGGAGAGGCTGTGCCAG 678
Qy 661 CCAACCGGCGCTGGCATCTACACCGGTGTCACTGTGGAGCTGGATCCACCATAT 720
Db 679 CCAACCGGCGCTGGCATCTACACCGGTGTCACTGTGGAGCTGGATCCACCATAT 738
Qy 721 GTCCCAAAAAAGCG 735
Db 739 GTCCCAAAAAAGCG 753

```

```

RESULT 3
US-09-598-982C-22
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO: 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

```

```

Query Match 99.6%; Score 731.8; DB 1; Length 771;
Best Local Similarity 99.7%; Pred. No. 0.054;
Matches 733; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy 1 ATGTCGGGGGTGAGAGGCCCCAGGAGCAAGTGGCCCTGGCAGGTGAGGCTGAGATC 60
Db 19 ATGTCGGGGGTGAGAGGCCCCAGGAGCAAGTGGCCCTGGCAGGTGAGGCTGAGATC 78
Qy 61 CACGGCCATTACTGATGACATTTCTGGGGGGCTCCCTCATTCACACCCCAATGGGTGTG 120
Db 79 CACGGCCATTACTGATGACATTTCTGGGGGGCTCCCTCATTCACACCCCAATGGGTGTG 138
Qy 121 ACCGAGCGCATGCGTGGGACCGGACGTCAAGATCTGGCCCTCCTCAGGGTGCACATG 180
Db 139 ACCGAGCGCATGCGTGGGACCGGACGTCAAGATCTGGCCCTCCTCAGGGTGCACATG 198
Qy 181 CGGAGGAGCACTCTACTACAGAGCAGTGTGTCGGGTCAAGAGATCATGTGCAC 240
Db 199 CGGAGGAGCACTCTACTACAGAGCAGTGTGTCGGGTCAAGAGATCATGTGCAC 258
Qy 241 CCAAGTTCTACACCGCCCAAGATCGGAGCGACATCGCCCTGCTGGAGCTGGAGAGCG 300
Db 259 CCAAGTTCTACACCGCCCAAGATCGGAGCGACATCGCCCTGCTGGAGCTGGAGAGCG 318
Qy 301 GTGAAGTCTTCAGACAGTCCACACGCTCACTGCGCCCTGCTGAGAGACTTTCCCC 360
Db 319 GTGAAGTCTTCAGACAGTCCACACGCTCACTGCGCCCTGCTGAGAGACTTTCCCC 378
Qy 361 CGGGGATGCCGTGTGGGTCACTGGCTGGGGCAGTGTGAACAATGATGAGCGCTCCCA 420
Db 379 CGGGGATGCCGTGTGGGTCACTGGCTGGGGCAGTGTGAACAATGATGAGCGCTCCCA 438
Qy 421 CGGCATTCTCTGAGACGAGTGAAGTCCCATATGGAACCAACATTTGTGACGCA 480
Db 439 CGGCATTCTCTGAGACGAGTGAAGTCCCATATGGAACCAACATTTGTGACGCA 498
Qy 481 AAATACACCTTGGGCGCTTACACGGGAGACGACGTCCGATGTCTCGTGAACAATGCTG 540
Db 499 AAATACACCTTGGGCGCTTACACGGGAGACGACGTCCGATGTCTCGTGAACAATGCTG 558
Qy 541 TGTGCGGGAAACACCGGAGGAGCTCATGTCCAGGGGCACTCCGAGGGGCCCTGTGTGC 600
Db 559 TGTGCGGGAAACACCGGAGGAGCTCATGTCCAGGGGCACTCCGAGGGGCCCTGTGTGC 618
Qy 601 AAGTGAAATGCACTGTGCTGAGGCGCGGTGTCACTGTGGGGGAGAGGCTGTGCCAG 660
Db 619 AAGTGAAATGCACTGTGCTGAGGCGCGGTGTCACTGTGGGGGAGAGGCTGTGCCAG 678
Qy 661 CCAACCGGCGCTGGCATCTACACCGGTGTCACTGTGGAGCTGGATCCACCATAT 720
Db 679 CCAACCGGCGCTGGCATCTACACCGGTGTCACTGTGGAGCTGGATCCACCATAT 738
Qy 721 GTCCCAAAAAAGCG 735
Db 739 GTCCCAAAAAAGCG 753

```

```

RESULT 4
US-09-598-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO: 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens

```



FEATURE:  
NAME/KEY: CDS  
LOCATION: (7) .. (753)  
US-09-598-982C-38

Query Match 99.3%; Score 730.2; DB 1; Length 771;  
Best Local Similarity 99.6%; Pred. No. 0.055;  
Matches 732; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY 1 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAGGTGAGCTGAGAGTC 60
DB 19 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAGGTGAGCTGAGAGTC 78
QY 61 CACGGCCCATCTGAGATGCACTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGTCTG 120
DB 79 CACGGCCCATCTGAGATGCACTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGTCTG 138
QY 121 ACCGAGCGCACTGGGTGGGACCGGACCTCAAGATTTGGCCCTCGAGGTGCACTG 180
DB 139 ACCGAGCGCACTGGGTGGGACCGGACCTCAAGATTTGGCCCTCGAGGTGCACTG 198
QY 181 CCGAGAGCAGCACTCTACTACAGGACCACTGCTGCCGTGAGAGATCATCGTGAC 240
DB 199 CCGAGAGCAGCACTCTACTACAGGACCACTGCTGCCGTGAGAGATCATCGTGAC 258
QY 241 CCAAGTTCTACACCGGCCCAATCGAGCGGACATCGCCCTGCTGAGCTGAGAGCCG 300
DB 259 CCAAGTTCTACACCGGCCCAATCGAGCGGACATCGCCCTGCTGAGCTGAGAGCCG 318
QY 301 GTGAAGGTCTCAAGCAGTGCACACGTCACCCCTGCCCTCGAGAGCTTTCCCG 360
DB 319 GTGAAGGTCTCAAGCAGTGCACACGTCACCCCTGCCCTCGAGAGCTTTCCCG 378
QY 361 CCGGGGATGCGGTGCTGAGTCACTGCTGGGGCGATGTGACAAATGATGAGCCCTCCA 420
DB 379 CCGGGGATGCGGTGCTGAGTCACTGCTGGGGCGATGTGACAAATGATGAGCCCTCCA 438
QY 421 CCGCATTTCTCTGTAAGAGGTGAAGTCCCATTAATGAAACCAATTGTGACGCA 480
DB 439 CCGCATTTCTCTGTAAGAGGTGAAGTCCCATTAATGAAACCAATTGTGACGCA 498
QY 481 AAATACCACTTGGGGCCCTACACGGGAGACGATCCGATGTCGATGACGACATGTC 540
DB 499 AAATACCACTTGGGGCCCTACACGGGAGACGATCCGATGTCGATGACGACATGTC 558
QY 541 TGTGCGGGGACACCCCGAGGAGTCAATGCAAGGCGACTCCGAGGGCCCTGTGTGC 600
DB 559 TGTGCGGGGACACCCCGAGGAGTCAATGCAAGGCGACTCCGAGGGCCCTGTGTGC 618
QY 601 AAGGTGATGCACTGTGCTGCAAGGCGGCTGTGCTGAGGCGGAGGCTGTGCTGAG 660
DB 619 AAGGTGATGCACTGTGCTGCAAGGCGGCTGTGCTGAGGCGGAGGCTGTGCTGAG 678
QY 661 CCAACCGGCTGGCATCTACACCGGTGACCTACTACTTGGATGATCCACCACTAT 720
DB 679 CCAACCGGCTGGCATCTACACCGGTGACCTACTACTTGGATGATCCACCACTAT 738
QY 721 GTCCCAAAAAAGCCG 735
DB 739 GTCCCAAAAAAGCCG 753

```

RESULT 5  
US-09-598-982C-20  
Sequence 20, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Mafilt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C

CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 271  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7) .. (753)  
US-09-598-982C-20

Query Match 99.1%; Score 728.6; DB 1; Length 771;  
Best Local Similarity 99.5%; Pred. No. 0.056;  
Matches 731; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

QY 1 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAGGTGAGCTGAGAGTC 60
DB 19 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAGGTGAGCTGAGAGTC 78
QY 61 CACGGCCCATCTGAGATGCACTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGTCTG 120
DB 79 CACGGCCCATCTGAGATGCACTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGTCTG 138
QY 121 ACCGAGCGCACTGGGTGGGACCGGACCTCAAGATTTGGCCCTCGAGGTGCACTG 180
DB 139 ACCGAGCGCACTGGGTGGGACCGGACCTCAAGATTTGGCCCTCGAGGTGCACTG 198
QY 181 CCGAGAGCAGCACTCTACTACAGGACCACTGCTGCCGTGAGAGATCATCGTGAC 240
DB 199 CCGAGAGCAGCACTCTACTACAGGACCACTGCTGCCGTGAGAGATCATCGTGAC 258
QY 241 CCAAGTTCTACACCGGCCCAATCGAGCGGACATCGCCCTGCTGAGCTGAGAGCCG 300
DB 259 CCAAGTTCTACACCGGCCCAATCGAGCGGACATCGCCCTGCTGAGCTGAGAGCCG 318
QY 301 GTGAAGGTCTCAAGCAGTGCACACGTCACCCCTGCCCTCGAGAGCTTTCCCG 360
DB 319 GTGAAGGTCTCAAGCAGTGCACACGTCACCCCTGCCCTCGAGAGCTTTCCCG 378
QY 361 CCGGGGATGCGGTGCTGAGTCACTGCTGGGGCGATGTGACAAATGATGAGCCCTCCA 420
DB 379 CCGGGGATGCGGTGCTGAGTCACTGCTGGGGCGATGTGACAAATGATGAGCCCTCCA 438
QY 421 CCGCATTTCTCTGTAAGAGGTGAAGTCCCATTAATGAAACCAATTGTGACGCA 480
DB 439 CCGCATTTCTCTGTAAGAGGTGAAGTCCCATTAATGAAACCAATTGTGACGCA 498
QY 481 AAATACCACTTGGGGCCCTACACGGGAGACGATCCGATGTCGATGACGACATGTC 540
DB 499 AAATACCACTTGGGGCCCTACACGGGAGACGATCCGATGTCGATGACGACATGTC 558
QY 541 TGTGCGGGGACACCCCGAGGAGTCAATGCAAGGCGACTCCGAGGGCCCTGTGTGC 600
DB 559 TGTGCGGGGACACCCCGAGGAGTCAATGCAAGGCGACTCCGAGGGCCCTGTGTGC 618
QY 601 AAGGTGATGCACTGTGCTGCAAGGCGGCTGTGCTGAGGCGGAGGCTGTGCTGAG 660
DB 619 AAGGTGATGCACTGTGCTGCAAGGCGGCTGTGCTGAGGCGGAGGCTGTGCTGAG 678
QY 661 CCAACCGGCTGGCATCTACACCGGTGACCTACTACTTGGATGATCCACCACTAT 720
DB 679 CCAACCGGCTGGCATCTACACCGGTGACCTACTACTTGGATGATCCACCACTAT 738
QY 721 GTCCCAAAAAAGCCG 735
DB 739 GTCCCAAAAAAGCCG 753

```

RESULT 6  
US-09-598-982C-36



```
|||||
Db 559 TGTGCGGGAAACCCGGAGGACTATATCAAGGAGCGCGGCGGACCTCTGGGTGTC 618
Qy 601 AAGGTGAATGGAACCTGGCTGAGGCGGGCGTGTGTCAGCTGGGGCGAGGGCTGTGCCAG 660
Db 619 AAGGTGAATGGAACCTGGCTGAGGCGGGCGTGTGTCAGCTGGGGCGAGGGCTGTGCCAG 678
Qy 661 CCCAACCGGCTGGGACTTACACCCGTGTCACTTACTTGGACTGATCCACACTAT 720
Db 679 CCCAACCGGCTGGGACTTACACCCGTGTCACTTACTTGGACTGATCCACACTAT 738
Qy 721 GTCCCCAAAAAGCCG 735
Db 739 GTCCCCAAAAAGCCG 753
```

```
RESULT 8
US-09-598-982C-26
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26
```

Query Match Best Local Similarity 98.7%; Score 725.4; DB 1; Length 771;

Matches 729; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

```
Qy 1 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAAGTGAAGCTGAAGTC 60
Db 19 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAAGTGAAGCTGAAGTC 78
Qy 61 CACGGCCCATCTGATGATGACTTTCTGCGGGGGCTCCCTATCAACCCCAAGTGGTCTG 120
Db 79 CACGGCCCATCTGATGATGACTTTCTGCGGGGGCTCCCTATCAACCCCAAGTGGTCTG 138
Qy 121 ACCGAGCGCACTGCGTGGGACCGGACGTCAGAGATCTGCGCGCCCTCAAGGGTGAACCTG 180
Db 139 ACCGAGCGCACTGCGTGGGACCGGACGTCAGAGATCTGCGCGCCCTCAAGGGTGAACCTG 198
Qy 181 CGGAGACAGACACTTACTACTACAGAGCAAGCTGCTGCGGTCAGAGATCAATCGTGAC 240
Db 199 CGGAGACAGACACTTACTACTACAGAGCAAGCTGCTGCGGTCAGAGATCAATCGTGAC 258
Qy 241 CCAAGTTCTACACCGCCCAAGATCGAGAGGACATGCGCTGTGAGAGCTGAGAGAGCCG 300
Db 259 CCAAGTTCTACACCGCCCAAGATCGAGAGGACATGCGCTGTGAGAGCTGAGAGAGCCG 318
Qy 301 GTGAAGGTCTCCAGCGACGTCACAGGTCACCGTCCCGCTGCGCTCAGAGACTTTCCCG 360
Db 319 GTGAAGGTCTCCAGCGACGTCACAGGTCACCGTCCCGCTGCGCTCAGAGACTTTCCCG 378
Qy 361 CCGGGAGTCCGCTGCTGAGTCACTGGCTGGGGCGATGTGAGCAATGATAGGCGCTCCCA 420
Db 379 CCGGGAGTCCGCTGCTGAGTCACTGGCTGGGGCGATGTGAGCAATGATAGGCGCTCCCA 438
```

```
Qy 421 CCGCATTTCTCTGAACAGGTGAAGTCCCCATATATGAAAAACCATTTTGAAGCA 480
Db 439 CCGCATTTCTCTGAACAGGTGAAGTCCCCATATATGAAAAACCATTTTGAAGCA 498
Qy 481 AATATCAACTTGGGCTTACACGGAGACAGACGTCCGATCTGTCGGTGAAGACATGCTG 540
Db 499 AATATCAACTTGGGCTTACACGGAGACAGACGTCCGATCTGTCGGTGAAGACATGCTG 558
Qy 541 TGTGCGGGAAACCCGGAGGAACTCATGCAAGGCGACTCCGAGAGGCCCTGTGTGTC 600
Db 559 TGTGCGGGAAACCCGGAGGAACTCATGCAAGGAGACGCCGCGGACACTGGTGTGTC 618
Qy 601 AAGGTGAATGGAACCTGGCTGAGGCGGGCGTGTGTCAGCTGGGGCGAGGGCTGTGCCAG 660
Db 619 AAGGTGAATGGAACCTGGCTGAGGCGGGCGTGTGTCAGCTGGGGCGAGGGCTGTGCCAG 678
Qy 661 CCCAACCGGCTGGGACTTACACCCGTGTCACTTACTTGGACTGATCCACACTAT 720
Db 679 CCCAACCGGCTGGGACTTACACCCGTGTCACTTACTTGGACTGATCCACACTAT 738
Qy 721 GTCCCCAAAAAGCCG 735
Db 739 GTCCCCAAAAAGCCG 753
```

```
RESULT 9
US-09-598-982C-40
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40
```

Query Match Best Local Similarity 98.5%; Score 723.8; DB 1; Length 771;

Matches 728; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

```
Qy 1 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAAGTGAAGCTGAAGTC 60
Db 19 ATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGGCAAGTGAAGCTGAAGTC 78
Qy 61 CACGGCCCATCTGATGATGACTTTCTGCGGGGGCTCCCTATCAACCCCAAGTGGTCTG 120
Db 79 CACGGCCCATCTGATGATGACTTTCTGCGGGGGCTCCCTATCAACCCCAAGTGGTCTG 138
Qy 121 ACCGAGCGCACTGCGTGGGACCGGACGTCAGAGATCTGCGCGCCCTCAAGGGTGAACCTG 180
Db 139 ACCGAGCGCACTGCGTGGGACCGGACGTCAGAGATCTGCGCGCCCTCAAGGGTGAACCTG 198
Qy 181 CGGAGACAGACACTTACTACTACAGAGCAAGCTGCTGCGGTCAGAGATCAATCGTGAC 240
Db 199 CGGAGACAGACACTTACTACTACAGAGCAAGCTGCTGCGGTCAGAGATCAATCGTGAC 258
Qy 241 CCAAGTTCTACACCGCCCAAGATCGAGAGGACATGCGCTGTGAGAGCTGAGAGAGCCG 300
Db 259 CCAAGTTCTACACCGCCCAAGATCGAGAGGACATGCGCTGTGAGAGCTGAGAGAGCCG 318
```

```

OY 301 GTGAAGTCTCCAGCCAGCTCCACAGCTCAACCTTCCCTGCTGAGAGACTTTCCCC 360
DB 319 GTGAAGTCTCCAGCCAGCTCCACAGCTCAACCTTCCCTGCTGAGAGACTTTCCCC 378
OY 351 CCGGGGATGCGTGTGGGTCACTGCTGGGGGCAATGAGCAATGATGAGGCGCTCCCA 420
DB 379 CCGGGGATGCGTGTGGGTCACTGCTGGGGGCAATGAGCAATGATGAGGCGCTCCCA 438
OY 421 CCGCATTTCCTCTGAGAGAGTGAAGTCCCATTAATGAAAACACATTTGTGACGCA 480
DB 439 CCGCATTTCCTCTGAGAGAGTGAAGTCCCATTAATGAAAACACATTTGTGACGCA 498
OY 481 AATATCACTTTGGGCTTACACGGGAGACGATCCGCTATGTCCTGAGACATGCTG 540
DB 499 AATATCACTTTGGGCTTACACGGGAGACGATCCGCTATGTCCTGAGACATGCTG 558
OY 541 TGTGCGGGAAACACCGGAGGGAATCATGCGAGGGGCACTCCGAGAGGCGCTGGTGTG 600
DB 559 TGTGCGGGAAACACCGGAGGGAATCATGCGAGGGGCACTCCGAGAGGCGCTGGTGTG 618
OY 601 AAGTGAAATGGCACTGTGCGAGGCGGGCGTGTGTCAGCTGAGGAGGAGGCTGTGCCAG 660
DB 619 AAGTGAAATGGCACTGTGCGAGGCGGGCGTGTGTCAGCTGAGGAGGAGGCTGTGCCAG 678
OY 661 CCCAACCGGCTGTGCACTACACCCGCTGTCACTTACTTGGATCGACATCTAT 720
DB 679 CCCAACCGGCTGTGCACTACACCCGCTGTCACTTACTTGGATCGACATCTAT 738
OY 721 GTCCCAAAAAGCCG 735
DB 739 GTCCCAAAAAGCCG 753

```

## RESULT 10

US-09-598-982C-42  
Sequence 42, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42

```

Query Match 98.5%; Score 723.8; DB 1; Length 771;  
Best Local Similarity 99.0%; Pred. No. 0.058; 7; Indels 0; Gaps 0;  
Matches 728; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

```

OY 1 ATGTGCGGGGTCAAGAGGCCCCCAGAGAGAGTGGCCCTGCGAGGTGAGCTGAGAGTC 60
DB 19 ATGTGCGGGGTCAAGAGGCCCCCAGAGAGAGTGGCCCTGCGAGGTGAGCTGAGAGTC 78
OY 61 CACGGCCCTACTGATGATCTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGTGTCTG 120
DB 79 CACGGCCCTACTGATGATCTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGTGTCTG 138
OY 121 ACCGAGCGCACTGTGCGGGAACGAGAGTCAAGATCTGCGGCTCAGGGTGAACCTG 180

```

```

DB 139 ACCGAGCGCACTGTGCGGGAACGAGAGTCAAGATCTGCGGCTCAGGGTGAACCTG 198
OY 181 CCGGAGAGCACTTCTACTACACGAGCAAGCTGTGCTGCCGGTCAAGAGATCATGTGTAC 240
DB 199 CCGGAGAGCACTTCTACTACACGAGCAAGCTGTGCTGCCGGTCAAGAGATCATGTGTAC 258
OY 241 CCAAGATTCTACACCGGCCAGATGAGAGCGGACATGCGCCCTGCGGAGCTGGAAGAGCG 300
DB 259 CCAAGATTCTACACCGGCCAGATGAGAGCGGACATGCGCCCTGCGGAGCTGGAAGAGCG 318
OY 301 GTGAAGTCTCCAGCCAGCTCCACAGCTCAACCTTCCCTGCTGAGAGACTTTCCCC 360
DB 319 GTGAAGTCTCCAGCCAGCTCCACAGCTCAACCTTCCCTGCTGAGAGACTTTCCCC 378
OY 361 CCGGGGATGCGTGTGGGTCACTGCTGGGGGCAATGAGCAATGATGAGGCGCTCCCA 420
DB 379 CCGGGGATGCGTGTGGGTCACTGCTGGGGGCAATGAGCAATGATGAGGCGCTCCCA 438
OY 421 CCGCATTTCCTCTGAGAGAGTGAAGTCCCATTAATGAAAACACATTTGTGACGCA 480
DB 439 CCGCATTTCCTCTGAGAGAGTGAAGTCCCATTAATGAAAACACATTTGTGACGCA 498
OY 481 AATATCACTTTGGGCTTACACGGGAGACGATCCGCTATGTCCTGAGACATGCTG 540
DB 499 AATATCACTTTGGGCTTACACGGGAGACGATCCGCTATGTCCTGAGACATGCTG 558
OY 541 TGTGCGGGAAACACCGGAGGGAATCATGCGAGGGGCACTCCGAGAGGCGCTGGTGTG 600
DB 559 TGTGCGGGAAACACCGGAGGGAATCATGCGAGGGGCACTCCGAGAGGCGCTGGTGTG 618
OY 601 AAGTGAAATGGCACTGTGCGAGGCGGGCGTGTGTCAGCTGAGGAGGAGGCTGTGCCAG 660
DB 619 AAGTGAAATGGCACTGTGCGAGGCGGGCGTGTGTCAGCTGAGGAGGAGGCTGTGCCAG 678
OY 661 CCCAACCGGCTGTGCACTACACCCGCTGTCACTTACTTGGATCGACATCTAT 720
DB 679 CCCAACCGGCTGTGCACTACACCCGCTGTCACTTACTTGGATCGACATCTAT 738
OY 721 GTCCCAAAAAGCCG 735
DB 739 GTCCCAAAAAGCCG 753

```

## RESULT 11

US-09-598-982C-20/c  
Sequence 20, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-20

```

Query Match 3.8%; Score 27.6; DB 1; Length 771;  
Best Local Similarity 45.4%; Pred. No. 17;  
Matches 99; Conservative 0; Mismatches 119; Indels 0; Gaps 0;

```

OY 31 AAGTGCGCTGTGAGGCTGAGAGTCAAGAGCCCATCTGGAATGCACTTCTGCGGG 90

```

```

Db      266 AACTGGGGTGCACGATGATCTCTGACCCGAGAGAGCTGGCTCTGTAGTAGAGTGC 207
Qy      91 GGCCTCCCTATCCACCCCGAGTGGGTGTGACCGAGCCACTGCGTGGAGCCGAGCTC 150
Db      206 TGTCTCCCGAGTTGACCTCTGAGGGGGGCGGCAAGTCTTTAGCGTCCGCTCCACGACGCG 147
Qy      151 AAGGATCTGGCCGCGCTCAGGGGTGCACTGGGGAGACACCTCTACTACGAGACGAG 210
Db      146 GCGGCGGTGACGACCCACTGGGGGTGATGAGGAGACCCCGCAGAAAGTGCATCCAGTAT 87
Qy      211 CTGCTGCCGTGACGAGATCATCTGTCACCCCAAGTT 248
Db      86 GGGCGGTGACTCTCAGGCTCAGCTGCGCAGGGCCACTT 49

RESULT 12
US-09-598-982C-36/c
; Sequence 36, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-36

Query Match
Best Local Similarity 45.4%; Score 27.6; DB 1; Length 771;
Matches 99; Conservative 0; Mismatches 119; Indels 0; Gaps 0;

Qy      31 AAGTGGCCCTGGAGGTGAGCTGAGAGTCCACGGCCCACTGATGATGACTTTCGCGG 90
Db      266 AACTGGGGTGCACGATGATCTCTGACCGGAGAGAGCTGTGCTGTAGTAGAGTGC 207
Qy      91 GGCCTCCCTATCCACCCCGAGTGGGTGTGACCGAGCCACTGCGTGGAGCCGAGCTC 150
Db      206 TGTCTCCCGAGTTGACCTCTGAGGGGGGCGGCAAGTCTTTAGCGTCCGCTCCACGACGCG 147
Qy      151 AAGGATCTGGCCGCGCTCAGGGGTGCACTGGGGAGACACCTCTACTACGAGACGAG 210
Db      146 GCGGCGGTGACGACCCACTGGGGGTGATGAGGAGACCCCGCAGAAAGTGCATCCAGTAT 87
Qy      211 CTGCTGCCGTGACGAGATCATCTGTCACCCCAAGTT 248
Db      86 GGGCGGTGACTCTCAGGCTCAGCTGCGCAGGGCCACTT 49

RESULT 13
US-09-598-982C-10/c
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C

```

```

; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
; US-09-598-982C-10

Query Match
Best Local Similarity 52.9%; Score 27.2; DB 1; Length 735;
Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

Qy      268 GCGGATCTGCCCTCTGTGAGCTGAGAGCGCGTGAAGTCTTCAGCCAGTCCACG 327
Db      453 GGGGACCTTCACTGCTCTCAGAGAAATGCGGTGGAGGCGCTCATCTATGTCACA-- 396
Qy      328 GTCACTGCCCCCTGCTCAGAGACTTCCCGGGGATGCGGTGCTGAGTCACTGC 387
Db      395 -TGGCCCAAGCAGTACGACCAAGCAGCATCCCGGGGGAAAGTCTCTGAGGAGGGG 337
Qy      388 TGGGGCGA--TGTGACATGATGAGGCGCTCCACCGCATTTCTCTGAAGCAGGTG 444
Db      336 CAGGTGACCGGTGTGACGTGGCTGAGAGCCTTCAACGGCTCTCCAGCTCCAGCAGGGC 277
Qy      445 AAGGTCCCC 453
Db      276 GATGTCCG 268

RESULT 14
US-09-598-982C-8/c
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-8

Query Match
Best Local Similarity 52.9%; Score 27.2; DB 1; Length 771;
Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

Qy      268 GCGGATCTGCCCTCTGTGAGCTGAGAGCGCGTGAAGTCTTCAGCCAGTCCACG 327
Db      471 GGGGACCTTCACTGCTCTCAGAGAAATGCGGTGGAGGCGCTCATCTATGTCACA-- 414
Qy      328 GTCACTGCCCCCTGCTCAGAGACTTCCCGGGGATGCGGTGCTGAGTCACTGC 387
Db      413 -TGGCCCAAGCAGTACGACCAAGCAGCATCCCGGGGGAAAGTCTCTGAGGAGGGGG 355
Qy      388 TGGGGCGA--TGTGACATGATGAGGCGCTCCACCGCATTTCTCTGAAGCAGGTG 444

```

```

Db      354 CAGGGTGAACCGTGTGAGCTGGAGACCTTCAACGGCTCTCACTCCAGCTCCAGCAGGCG 295
Qy      445 AAGTCCCC 453
Db      294 GATGTCCGC 286

```

## RESULT 15

US-09-598-982C-24/c

Sequence 24, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendescho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

PRIOR FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 24

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-24

Query Match 3.7%; Score 27.2; DB 1; Length 771;  
 Best Local Similarity 52.9%; Pred. No. 17;  
 Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

```

Qy      268 GCGGACATCGCCCTGCTGAGCTGGAGACCGCGTGAAGCTTCCAGCAGCTCCACG 327
Db      471 GGGGACCTTCACTGCTTCAAGGAAATGGCGGTGGAGCGCTCATATGTCACA-- 414
Qy      328 GTCAACCTGCCCCCTGCTGAGACCTTCCCCCGGGGAGTCCGCTGAGTCACTGGC 387
Db      413 -TCGCCCAAGCAGTGAACCGACGAGCATCCCCGGGGGAAAGTCTCTGAGGCAAGGGG 355
Qy      388 TGGGGCGA--TGTGACAATGATGAGCGCTCCACCGCCATTCTCTGAAGCAGGTG 444
Db      354 CAGGGTGAACCGTGTGAGCTGGAGACCTTCAACGGCTCTCACTCCAGCAGGCG 295
Qy      445 AAGTCCCC 453
Db      294 GATGTCCGC 286

```

## RESULT 16

US-09-598-982C-26/c

Sequence 26, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendescho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

PRIOR FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 26

LENGTH: 771

TYPE: DNA

```

; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

```

Query Match 3.7%; Score 27.2; DB 1; Length 771;  
 Best Local Similarity 52.9%; Pred. No. 17;  
 Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

```

Qy      268 GCGGACATCGCCCTGCTGAGCTGGAGACCGGTGAAGCTTCCAGCAGCTCCACG 327
Db      471 GGGGACCTTCACTGCTTCAAGGAAATGGCGGTGGAGCGCTCATATGTCACA-- 414
Qy      328 GTCAACCTGCCCCCTGCTGAGACCTTCCCCCGGGGAGTCCGCTGAGTCACTGGC 387
Db      413 -TCGCCCAAGCAGTGAACCGACGAGCATCCCCGGGGGAAAGTCTCTGAGGCAAGGGG 355
Qy      388 TGGGGCGA--TGTGACAATGATGAGCGCTCCACCGCCATTCTCTGAAGCAGGTG 444
Db      354 CAGGGTGAACCGTGTGAGCTGGAGACCTTCAACGGCTCTCACTCCAGCAGGCG 295
Qy      445 AAGTCCCC 453
Db      294 GATGTCCGC 286

```

## RESULT 17

US-09-598-982C-40/c

Sequence 40, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendescho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

PRIOR FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 40

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-40

Query Match 3.5%; Score 25.6; DB 1; Length 771;  
 Best Local Similarity 52.4%; Pred. No. 17;  
 Matches 99; Conservative 0; Mismatches 84; Indels 6; Gaps 2;

```

Qy      268 GCGGACATCGCCCTGCTGAGCTGGAGACCGGTGAAGCTTCCAGCAGCTCCACG 327
Db      471 GGGGACCTTCACTGCTTCAAGGAAATGGCGGTGGAGCGCTCATATGTCACA-- 414
Qy      328 GTCAACCTGCCCCCTGCTGAGACCTTCCCCCGGGGAGTCCGCTGAGTCACTGGC 387
Db      413 -TCGCCCAAGCAGTGAACCGACGAGCATCCCCGGGGGAAAGTCTCTGAGGCAAGGGG 355
Qy      388 TGGGGCGA--TGTGACAATGATGAGCGCTCCACCGCCATTCTCTGAAGCAGGTG 444
Db      354 CAGGGTGAACCGTGTGAGCTGGAGACCTTCAACGGCTCTCACTCCAGCAGGCG 295
Qy      445 AAGTCCCC 453
Db      294 GATGTCCGC 286

```

```
RESULT 18
US-09-598-982C-42/c
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42
```

```
Query Match          3.5%; Score 25.6; DB 1; Length 771;
Best Local Similarity 52.4%; Pred. No. 17;
Matches 99; Conservative 0; Mismatches 84; Indels 6; Gaps 2;
```

```
QY 268 GGGGACATGCGCCCTGCTGAGAGCGGATGAGTCTCCAGCAGCAGCAGC 327
   |||||
DB 471 GGGGACCTTCACTGCTTCAAGAAATGCGGTGAGGCGCTCATCTTGCACA-- 414
   |||||
QY 328 GTCACTGCGCCCTGCTGAGAGCCTTCCCCCGGAGTGCCTGCTGAGTGC 387
   |||||
DB 413 -TCGCCCAAGCAGTACCCAGCAGGCGATCCCGGGGAAAGTCTCTGAGGCGAGG 355
   |||||
QY 388 TGGGGCGA---TGTGACATGATGAGCGGCTCCACCCCATTTCTTGAAGCAGTG 444
   |||||
DB 354 CAGGGTGACCTGTGTGACGTGTGAGAGCGTTCACTGCTCTCCAGCTCCAGCAGG 295
   |||||
QY 445 AAGGTCCCC 453
   |||||
DB 294 GATGTCCG 286
```

```
RESULT 19
US-09-598-982C-22/c
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22
```

```
Query Match          3.3%; Score 24.2; DB 1; Length 771;
Best Local Similarity 52.8%; Pred. No. 17;
```

```
Matches 94; Conservative 0; Mismatches 78; Indels 6; Gaps 2;
QY 268 GGGGACATGCGCCCTGCTGAGAGCGGATGAGTCTCCAGCAGCAGCAGC 327
   |||||
DB 471 GGGGACCTTCACTGCTTCAAGAAATGCGGTGAGGCGCTCATCTTGCACA-- 414
   |||||
QY 328 GTCACTGCGCCCTGCTGAGAGCCTTCCCCCGGAGTGCCTGCTGAGTGC 387
   |||||
DB 413 -TCGCCCAAGCAGTACCCAGCAGGCGATCCCGGGGAAAGTCTCTGAGGCGAGG 355
   |||||
QY 388 TGGGGCGA---TGTGACATGATGAGCGGCTCCACCCCATTTCTTGAAGCAG 442
   |||||
DB 354 CAGGGTGACCTGTGTGACGTGTGAGAGCGTTCACTGCTCTCCAGCTCCAGCAG 297
   |||||
```

```
RESULT 20
US-09-598-982C-38/c
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38
```

```
Query Match          3.1%; Score 22.8; DB 1; Length 771;
Best Local Similarity 44.0%; Pred. No. 17;
Matches 96; Conservative 0; Mismatches 122; Indels 0; Gaps 0;
```

```
QY 31 AAGTGCCCTGCGAGTGAGGCTTGAAGTCCAGCGCCCATCTGAGTCACTTGC 90
   |||||
DB 266 AACTGTGGTGACAGATATCTGCTGACCGGACAGACTGCTCTGTAAGAGTGC 207
   |||||
QY 91 GGCTTCCTCATTCACCCCACTGGGTGTAACCGCAGGCACTGTGTGGACCGGAC 150
   |||||
DB 206 TGTCTCCGCAATGTGACCTTGAAGGCGGCGAGATCTTGAACGTCCGATCCAG 147
   |||||
QY 151 AAGATCTGCGCGCCCTGAGGAGTGAAGTGGGAGAGCAGCACTTACTACAGAG 210
   |||||
DB 146 GCTGGGTGACAGCACCCTGAGGGGTGATGAGGAGAGGCGGCGAGAGTGAAT 87
   |||||
QY 211 CTGTCGCGGTCAAGCAGGATCATGTGACCCACAGTT 248
   |||||
DB 86 GGGCGGTGACTTCAAGGCTCACTGACGAGGACACTT 49
   |||||
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Search completed: August 26, 2005, 12:32:27
Job time : 4.68178 secs
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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 26, 2005, 12:31:55 ; Search time 2.8134 Seconds  
(without alignments)  
4.206 Million cell updates/sec



Title: US-09-598-982C-20  
Perfect score: 771  
Sequence: 1 gggccctcagaaagaat.....cgtgaagcgccgcctcgt 771  
Scoring table: IDENTITY NUC  
Gapop 10.0, Gapext 0.5  
Searched: 10 seqs, 7674 residues  
Total number of hits satisfying chosen parameters: 20  
Minimum DB seq length: 0  
Maximum DB seq length: inf  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 20 summaries  
Database: US09598982C\_rev.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	771	100.0	771	1	US-09-598-982C-20 Sequence 20, Appl
2	769.4	99.8	771	1	US-09-598-982C-26 Sequence 36, Appl
3	764.6	99.2	771	1	US-09-598-982C-8 Sequence 8, Appl
4	761.4	98.8	771	1	US-09-598-982C-22 Sequence 22, Appl
5	759.8	98.5	771	1	US-09-598-982C-38 Sequence 38, Appl
6	755	97.9	771	1	US-09-598-982C-24 Sequence 24, Appl
7	755	97.9	771	1	US-09-598-982C-26 Sequence 26, Appl
8	753.4	97.7	771	1	US-09-598-982C-40 Sequence 40, Appl
9	753.4	97.7	771	1	US-09-598-982C-42 Sequence 42, Appl
10	728.6	94.5	735	1	US-09-598-982C-10 Sequence 10, Appl
11	32.4	4.2	771	1	US-09-598-982C-20 Sequence 20, Appl
12	32.4	4.2	771	1	US-09-598-982C-36 Sequence 36, Appl
13	28.2	3.7	771	1	US-09-598-982C-8 Sequence 8, Appl
14	28.2	3.7	771	1	US-09-598-982C-22 Sequence 22, Appl
15	28.2	3.7	771	1	US-09-598-982C-24 Sequence 24, Appl
16	28.2	3.7	771	1	US-09-598-982C-26 Sequence 26, Appl
17	28.2	3.7	771	1	US-09-598-982C-38 Sequence 38, Appl
18	28.2	3.7	771	1	US-09-598-982C-40 Sequence 40, Appl
19	28.2	3.7	771	1	US-09-598-982C-42 Sequence 42, Appl
20	27.6	3.6	735	1	US-09-598-982C-10 Sequence 10, Appl

## ALIGNMENTS

RESULT 1  
US-09-598-982C-20  
Sequence 20, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 20  
LENGTH: 771

TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7) .. (753)  
US-09-598-982C-20

Query Match 100.0%; Score 771; DB 1; Length 771;  
Best Local Similarity 100.0%; Pred. No. 0.036;  
Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Q	1	GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAGAGAGCCCCCAGAGACAAATGAGCCCTG	60
Q	1	GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAGAGAGCCCCCAGAGACAAATGAGCCCTG	60
Q	61	CAGGTGAGCTTGAAGTTCACGCGCCATCTGATGACCTTTCGGGGGCTCCCTATC	120
Q	61	CAGGTGAGCTTGAAGTTCACGCGCCATCTGATGACCTTTCGGGGGCTCCCTATC	120
Q	121	CACCCCGAGTGGTGTGACCGCGCGCGTGGGAGACCGGACGTCAGAGATCTGGCC	180
Q	121	CACCCCGAGTGGTGTGACCGCGCGCGTGGGAGACCGGACGTCAGAGATCTGGCC	180
Q	181	GGCCTCAAGGTGCACTGCGGAGACACCTCTACTACAGAGACAGCTGCTCGGTC	240
Q	181	GGCCTCAAGGTGCACTGCGGAGACACCTCTACTACAGAGACAGCTGCTCGGTC	240
Q	241	AGCAGATCATGTGACCCACAGTTCTACACCGCCAGATCGAGCGGATCGCCTG	300
Q	241	AGCAGATCATGTGACCCACAGTTCTACACCGCCAGATCGAGCGGATCGCCTG	300
Q	301	CTGAGATCATGTGACCCACAGTTCTACACCGCCAGATCGAGCGGATCGCCTG	360
Q	301	CTGAGATCATGTGACCCACAGTTCTACACCGCCAGATCGAGCGGATCGCCTG	360
Q	361	GCCTCAAGACCTTCCCCCGGGAGTCCGTGCTGAGTCACTGCTGGGGGATGTGAC	420
Q	361	GCCTCAAGACCTTCCCCCGGGAGTCCGTGCTGAGTCACTGCTGGGGGATGTGAC	420
Q	421	AATGATGAGCGCTCCACCGCCATTTCTCTGAGAGAGTGAAGTCCCATATGAA	480
Q	421	AATGATGAGCGCTCCACCGCCATTTCTCTGAGAGAGTGAAGTCCCATATGAA	480
Q	481	AACCAATTTGTGACGAAATACCACTTGGGCGCTACACGGAGACAGTCCGATC	540
Q	481	AACCAATTTGTGACGAAATACCACTTGGGCGCTACACGGAGACAGTCCGATC	540
Q	541	GTCCGTGACGATGCTGTGTCGGGAGACACCGGAGGATCATGCGAGGCGATCC	600
Q	541	GTCCGTGACGATGCTGTGTCGGGAGACACCGGAGGATCATGCGAGGCGATCC	600
Q	601	GGAGGGCCCTGTGTGCAAGTGAATGACCTGCGTGGAGCGGGCGTGTGAGCTG	660
Q	601	GGAGGGCCCTGTGTGCAAGTGAATGACCTGCGTGGAGCGGGCGTGTGAGCTG	660
Q	661	GGCGAGGCTGTGTCGCGCCAGCCGCGCTGACATCAACCGGTGACCTACTG	720
Q	661	GGCGAGGCTGTGTCGCGCCAGCCGCGCTGACATCAACCGGTGACCTACTG	720
Q	721	GACTGATCCACCACTATGTCGCCAAAAGCCGTGAAGCGGCGCGCTGCT	771
Q	721	GACTGATCCACCACTATGTCGCCAAAAGCCGTGAAGCGGCGCGCTGCT	771

RESULT 2  
US-09-598-982C-36  
Sequence 36, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 36  
LENGTH: 771

```

; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-36

```

```

Query Match      99.8%; Score 769.4; DB 1; Length 771;
Best Local Similarity 99.9%; Pred. No. 0.036; Indels 0; Gaps 0;
Matches 770; Conservative 0; Mismatches 1;

```

```

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGCCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGCCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCTTGAAGTCCAGCGCCCACTGAGATGCACTTCTCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAAGTCCAGCGCCCACTGAGATGCACTTCTCGGGGGCTCCCTCATC 120
QY 121 CACCCCAATGGGTGTGACCGCGGGGTGCGTGGGACCGGAGTCAAGATCTGGGC 180
DB 121 CACCCCAATGGGTGTGACCGCGGGGTGCGTGGGACCGGAGTCAAGATCTGGGC 180
QY 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGTG 240
DB 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGTG 240
QY 241 AGCAGATCATGTGTCACCAAGTTCTACACCGCCAGATGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGTCACCAAGTTCTACACCGCCAGATGAGCGGACATCGCCCTG 300
QY 301 CTGGAGCTGAGAGAGCGGGTGAAGGTCTCAGCGACGTCACAGGTCACTGCCCCCT 360
DB 301 CTGGAGCTGAGAGAGCGGGTGAAGGTCTCAGCGACGTCACAGGTCACTGCCCCCT 360
QY 361 GGCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGGTCACTGCTGGGGCGATGGAC 420
DB 361 GGCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGGTCACTGCTGGGGCGATGGAC 420
QY 421 AATGATGAGCGCTCCACCGGCATTCTCTGAGCAGGTGAAGTCCCATATGGAA 480
DB 421 AATGATGAGCGCTCCACCGGCATTCTCTGAGCAGGTGAAGTCCCATATGGAA 480
QY 481 AACCACATTTGTGAGCAAAATACCACTTGGGCTTACAGGGAGAGCACTCCGCGCATC 540
DB 481 AACCACATTTGTGAGCAAAATACCACTTGGGCTTACAGGGAGAGCACTCCGCGCATC 540
QY 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCGGAGGAGCTCATGCGAGGCGCATCC 600
DB 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCGGAGGAGCTCATGCGAGGCGCATCC 600
QY 601 GGAAGGCCCCCTGGTGTGCAAGGTGATGGCACCTGGCTCAAGCGGCGTGTGACGTGG 660
DB 601 GGAAGGCCCCCTGGTGTGCAAGGTGATGGCACCTGGCTCAAGCGGCGTGTGACGTGG 660
QY 661 GCGAGGGGTGTGTCAGGCGCAACCGGCTGGGATTAACCGGTGTCACTTAATCTTG 720
DB 661 GCGAGGGGTGTGTCAGGCGCAACCGGCTGGGATTAACCGGTGTCACTTAATCTTG 720
QY 721 GACTGATCCACCACTATGTCCCAAAAAGCGGTGAAGCGGCGCGGTGT 771
DB 721 GACTGATCCACCACTATGTCCCAAAAAGCGGTGAAGCGGCGCGGTGT 771

```

```

RESULT 3
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-8

```

```

Query Match      99.2%; Score 764.6; DB 1; Length 771;
Best Local Similarity 99.5%; Pred. No. 0.038; Indels 4; Gaps 0;
Matches 767; Conservative 0; Mismatches 4;

```

```

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGCCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGCCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCTTGAAGTCCAGCGCCCACTGAGATGCACTTCTCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAAGTCCAGCGCCCACTGAGATGCACTTCTCGGGGGCTCCCTCATC 120
QY 121 CACCCCAATGGGTGTGACCGCGGGGTGCGTGGGACCGGAGTCAAGATCTGGGC 180
DB 121 CACCCCAATGGGTGTGACCGCGGGGTGCGTGGGACCGGAGTCAAGATCTGGGC 180
QY 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGTG 240
DB 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGTG 240
QY 241 AGCAGATCATGTGTCACCAAGTTCTACACCGCCAGATGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGTCACCAAGTTCTACACCGCCAGATGAGCGGACATCGCCCTG 300
QY 301 CTGGAGCTGAGAGAGCGGGTGAAGGTCTCAGCGACGTCACAGGTCACTGCCCCCT 360
DB 301 CTGGAGCTGAGAGAGCGGGTGAAGGTCTCAGCGACGTCACAGGTCACTGCCCCCT 360
QY 361 GGCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGGTCACTGCTGGGGCGATGGAC 420
DB 361 GGCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGGTCACTGCTGGGGCGATGGAC 420
QY 421 AATGATGAGCGCTCCACCGGCATTCTCTGAGCAGGTGAAGTCCCATATGGAA 480
DB 421 AATGATGAGCGCTCCACCGGCATTCTCTGAGCAGGTGAAGTCCCATATGGAA 480
QY 481 AACCACATTTGTGAGCAAAATACCACTTGGGCTTACAGGGAGAGCACTCCGCGCATC 540
DB 481 AACCACATTTGTGAGCAAAATACCACTTGGGCTTACAGGGAGAGCACTCCGCGCATC 540
QY 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCGGAGGAGCTCATGCGAGGCGCATCC 600
DB 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCGGAGGAGCTCATGCGAGGCGCATCC 600
QY 601 GGAAGGCCCCCTGGTGTGCAAGGTGATGGCACCTGGCTCAAGCGGCGTGTGACGTGG 660
DB 601 GGAAGGCCCCCTGGTGTGCAAGGTGATGGCACCTGGCTCAAGCGGCGTGTGACGTGG 660

```

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Qy 661 GCGGAGGCTGTGCCAGCCCAACCGGCTGGCATCTACACCCTGTGACTACTACTTGG 720
Db 661 GCGGAGGCTGTGCCAGCCCAACCGGCTGGCATCTACACCCTGTGACTACTACTTGG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771

```

## RESULT 4

```

US-09-598-982C-22
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

```

```

Query Match 98.8%; Score 761.4; DB 1; Length 771;
Best Local Similarity 99.2%; Pred. No. 0.039; Mismatches 6; Indels 0; Gaps 0;
Matches 765; Conservative 0;

```

```

Qy 1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Db 1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Qy 61 CAGGTGAGCTGAGAGTCAACGCGCCATCTGATGCACTTCTGGGGGGCTCCCTCATC 120
Db 61 CAGGTGAGCTGAGAGTCAACGCGCCATCTGATGCACTTCTGGGGGGCTCCCTCATC 120
Qy 121 CACCCCAAGTGGGTCTGACCGCGCGGTGCGTGGAGACCGGACGTCAAGGATCTGGCC 180
Db 121 CACCCCAAGTGGGTCTGACCGCGCGGTGCGTGGAGACCGGACGTCAAGGATCTGGCC 180
Qy 181 GCGCTCAAGGTGCACTGCGGGAGAGCACTCTACTACAGAACCAAGTGTGCGGCTC 240
Db 181 GCGCTCAAGGTGCACTGCGGGAGAGCACTCTACTACAGAACCAAGTGTGCGGCTC 240
Qy 241 AGCAGGATCATGTGTCACCAAGTTCTACACCGCCGAGATGGAGCGGACATGGCCCTG 300
Db 241 AGCAGGATCATGTGTCACCAAGTTCTACACCGCCGAGATGGAGCGGACATGGCCCTG 300
Qy 301 CTGAGCTGAGAGACCGGTGAAGGTCTCAAGCAAGTCAACCGGACCTGTGCCCCCT 360
Db 301 CTGAGCTGAGAGACCGGTGAAGGTCTCAAGCAAGTCAACCGGACCTGTGCCCCCT 360
Qy 361 GCGTCAAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420
Db 361 GCGTCAAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420
Qy 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCAATATGGA 480
Db 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCAATATGGA 480
Qy 481 AACCAATTTGAGCGCAAAATACCACTTGGCGCTTCAACGAGAGACGATCGGCATC 540
Db 481 AACCAATTTGAGCGCAAAATACCACTTGGCGCTTCAACGAGAGACGATCGGCATC 540

```

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Qy 541 GTCCGTGACGACATGTGTGTGCCGGAAACACCCGAGAGGACTATGCAAGGGGCACTCC 600
Db 541 GTCCGTGACGACATGTGTGTGCCGGAAACACCCGAGAGGACTATGCAAGGGGCACTCC 600
Qy 601 GAGAGGCCCCGTGTGTGCAAGTGAATGGACCTGCTGCAAGGCGGCGTGTGACTGG 660
Db 601 GAGAGGCCCCGTGTGTGCAAGTGAATGGACCTGCTGCAAGGCGGCGTGTGACTGG 660
Qy 661 GCGGAGGCTGTGCCAGCCCAACCGGCTGGCATCTACACCCTGTGACTACTACTTGG 720
Db 661 GCGGAGGCTGTGCCAGCCCAACCGGCTGGCATCTACACCCTGTGACTACTACTTGG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771

```

## RESULT 5

```

US-09-598-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

```

```

Query Match 98.5%; Score 759.8; DB 1; Length 771;
Best Local Similarity 99.1%; Pred. No. 0.04; Mismatches 7; Indels 0; Gaps 0;
Matches 764; Conservative 0;

```

```

Qy 1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Db 1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Qy 61 CAGGTGAGCTGAGAGTCAACGCGCCATCTGATGCACTTCTGGGGGGCTCCCTCATC 120
Db 61 CAGGTGAGCTGAGAGTCAACGCGCCATCTGATGCACTTCTGGGGGGCTCCCTCATC 120
Qy 121 CACCCCAAGTGGGTCTGACCGCGCGGTGCGTGGAGACCGGACGTCAAGGATCTGGCC 180
Db 121 CACCCCAAGTGGGTCTGACCGCGCGGTGCGTGGAGACCGGACGTCAAGGATCTGGCC 180
Qy 181 GCGCTCAAGGTGCACTGCGGGAGAGCACTCTACTACAGAACCAAGTGTGCGGCTC 240
Db 181 GCGCTCAAGGTGCACTGCGGGAGAGCACTCTACTACAGAACCAAGTGTGCGGCTC 240
Qy 241 AGCAGGATCATGTGTCACCAAGTTCTACACCGCCGAGATGGAGCGGACATGGCCCTG 300
Db 241 AGCAGGATCATGTGTCACCAAGTTCTACACCGCCGAGATGGAGCGGACATGGCCCTG 300
Qy 301 CTGAGCTGAGAGACCGGTGAAGGTCTCAAGCAAGTCAACCGGACCTGTGCCCCCT 360
Db 301 CTGAGCTGAGAGACCGGTGAAGGTCTCAAGCAAGTCAACCGGACCTGTGCCCCCT 360
Qy 361 GCGTCAAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420

```

```
Db      361 GCCTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCACTGGCTGGGGCGATGTGAC 420
Qy      421 AATGATGAGCGCTCCCAACCCGCAATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
Db      421 AATGATGAGCGCTCCCAACCCGCAATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
Qy      481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTACACGCGAGACAGACGTCCGATC 540
Db      481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTACACGCGAGACAGACGTCCGATC 540
Qy      541 GTCCGTGACGACATGTGTGTGTGTCGGGGAACACCCGAGGAGACATCAGCCAGGCGCATCC 600
Db      541 GTCCGTGACGACATGTGTGTGTGTCGGGGAACACCCGAGGAGACATCAGCCAGGCGCATCC 600
Qy      601 GGAGGGCCCCCTGGTGTGACAGGTGAATGGACACTGGCTCAGAGCGGGCGTGTCAAGCTGG 660
Db      601 GGAGGGCCCCCTGGTGTGACAGGTGAATGGACACTGGCTCAGAGCGGGCGTGTCAAGCTGG 660
Qy      661 GGCGAGGCTGTGTGCCAGCCCAACCGGCTGGCATCTACACCCGTGTCACTACTACTTG 720
Db      661 GGCGAGGCTGTGTGCCAGCCCAACCGGCTGGCATCTACACCCGTGTCACTACTACTTG 720
Qy      721 GACTGATTCACACCACTATGTCCCAAAAGCCGTGAAGCGGCCGCGTGT 771
Db      721 GACTGATTCACACCACTATGTCCCAAAAGCCGTGAAGCGGCCGCGTGT 771
```

```
RESULT 6
US-09-598-982C-24
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24
```

```
Query Match      97.9%; Score 755; DB 1; Length 771;
Best Local Similarity 98.7%; Pred.No.0.042;
Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;
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```
Qy      1 GGGCCCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCCTTGAGAGTCCAGGCCCCATATCTGATGCACTTTCGCGGGGCTTCCTCATC 120
Db      61 CAGGTGAGCCTTGAGAGTCCAGGCCCCATATCTGATGCACTTTCGCGGGGCTTCCTCATC 120
Qy      121 CACCCCAAGTGGGTGTGACCGGCGCGGTGTGATGGAGCCGGAACGTCAAGATCTGGGCG 180
Db      121 CACCCCAAGTGGGTGTGACCGGCGCGGTGTGATGGAGCCGGAACGTCAAGATCTGGGCG 180
Qy      181 GGCCTCAGGGGTGCAACTGGCGGAGACAGCACTTACTACAGGACAGAGCTGTGCGCGTTC 240
Db      181 GGCCTCAGGGGTGCAACTGGCGGAGACAGCACTTACTACAGGACAGAGCTGTGCGCGTTC 240
Qy      241 AGCAGGATCATGTGACCAACAGTTCTACACCGCCCAAGATCGAGCGGACATCGCCCTTG 300
```

```
Db      241 AGCAGGATCATGTGACCAACAGTTCTACACCGCCCAAGATCGAGCGGACATCGCCCTTG 300
Qy      301 CTGAGCTGAGAGAGCCCGGTGAAGTCTTCAGACCACTGTCCAACAGGTCAACCTTGCCCCCT 360
Db      301 CTGAGCTGAGAGAGCCCGGTGAAGTCTTCAGACCACTGTCCAACAGGTCAACCTTGCCCCCT 360
Qy      361 GCCTCAGAGACCTTCCCCCGGGAGATGCGGTGTGTGATCTGTGCTGGGGCGATGTGAC 420
Db      361 GCCTCAGAGACCTTCCCCCGGGAGATGCGGTGTGTGATCTGTGCTGGGGCGATGTGAC 420
Qy      421 AATGATGAGCGCTCCCAACCCGCAATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
Db      421 AATGATGAGCGCTCCCAACCCGCAATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
Qy      481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTACACGCGAGACAGACGTCCGATC 540
Db      481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTACACGCGAGACAGACGTCCGATC 540
Qy      541 GTCCGTGACGACATGTGTGTGTCGGGGAACACCCGAGGAGACATGTCAGGGCGCATTC 600
Db      541 GTCCGTGACGACATGTGTGTGTCGGGGAACACCCGAGGAGACATGTCAGGGCGCATTC 600
Qy      601 GGAGGGCCCCCTGGTGTGACAGGTGAATGGACACTGGCTCAGAGCGGGCGTGTCAAGCTGG 660
Db      601 GGAGGGCCCCCTGGTGTGACAGGTGAATGGACACTGGCTCAGAGCGGGCGTGTCAAGCTGG 660
Qy      661 GGCGAGGCTGTGTGCCAGCCCAACCGGCTGGCATCTACACCCGTGTCACTACTACTTG 720
Db      661 GGCGAGGCTGTGTGCCAGCCCAACCGGCTGGCATCTACACCCGTGTCACTACTACTTG 720
Qy      721 GACTGATTCACACCACTATGTCCCAAAAGCCGTGAAGCGGCCGCGTGT 771
Db      721 GACTGATTCACACCACTATGTCCCAAAAGCCGTGAAGCGGCCGCGTGT 771
```

```
RESULT 7
US-09-598-982C-26
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26
```

```
Query Match      97.9%; Score 755; DB 1; Length 771;
Best Local Similarity 98.7%; Pred.No.0.042;
Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;
```

```
Qy      1 GGGCCCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTCGAGAAAAGATGTCGCGGGGTCAAGAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCCTTGAGAGTCCAGGCCCCATATCTGATGCACTTTCGCGGGGCTTCCTCATC 120
Db      61 CAGGTGAGCCTTGAGAGTCCAGGCCCCATATCTGATGCACTTTCGCGGGGCTTCCTCATC 120
```

```

Qy 121 CACCCCGAGTGGGTCTGACCGCCGCGGTGCTGGAGACCGGACGTCAAGAGTCTGGCC 180
Db 121 CACCCCGAGTGGGTCTGACCGCCGCGGTGCTGGAGACCGGACGTCAAGAGTCTGGCC 180
Qy 181 GGCCTCAGGGGTGCAACTGCGGGAGACGACCTTCACTACAGAGACCAAGTCTGCGGTG 240
Db 181 GGCCTCAGGGGTGCAACTGCGGGAGACGACCTTCACTACAGAGACCAAGTCTGCGGTG 240
Qy 241 AGCAGAGATCATGTGTGACACCAAGTTCACACCGCCGAGATGAGAGCGGACATTCGCGGTG 300
Db 241 AGCAGAGATCATGTGTGACACCAAGTTCACACCGCCGAGATGAGAGCGGACATTCGCGGTG 300
Qy 301 CTGAGAGCTGAGAGAGCCGGGTGAAGTCTCAGCCACGTCACACCGGTACCTTGCCTT 360
Db 301 CTGAGAGCTGAGAGAGCCGGGTGAAGTCTCAGCCACGTCACACCGGTACCTTGCCTT 360
Qy 361 GCTCAGAGACCTTCCCGCGGGAGATGCCGTGCTGGGTCACTGGCTGGGGCGATGTGGAC 420
Db 361 GCTCAGAGACCTTCCCGCGGGAGATGCCGTGCTGGGTCACTGGCTGGGGCGATGTGGAC 420
Qy 421 AATGATGAGCGGCTCCGACCGGCATTTCTCTGAAACAGAGTGAAGTCCCATATGGA 480
Db 421 AATGATGAGCGGCTCCGACCGGCATTTCTCTGAAACAGAGTGAAGTCCCATATGGA 480
Qy 481 AACCAATTTGTGACGCAAAATATACCACTTGGCGCTACACGGAAGACGACGTCCGCAATC 540
Db 481 AACCAATTTGTGACGCAAAATATACCACTTGGCGCTACACGGAAGACGACGTCCGCAATC 540
Qy 541 GTCCGTGACGACATGCTGTGTGCCGGGAAACACCGGAGGGAATCATGCGGCGCATCTCC 600
Db 541 GTCCGTGACGACATGCTGTGTGCCGGGAAACACCGGAGGGAATCATGCGGCGCATCTCC 600
Qy 601 GGAGAGGCGGCTGTGTGACAGGTGAATGCACTGTGCGGAGCGGGGTGTGACGCTGG 660
Db 601 GGAGAGGCGGCTGTGTGACAGGTGAATGCACTGTGCGGAGCGGGGTGTGACGCTGG 660
Qy 661 GGCGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCTACACCGGTGCACTACTACTTG 720
Db 661 GGCGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCTACACCGGTGCACTACTACTTG 720
Qy 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771
Db 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771

```

RESULT 8  
US-09-982C-40  
Sequence 40, Application US/09598982C

GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffett, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SBO ID NO 40  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-40

Query Match 97.7%; Score 753.4; DB 1; Length 771;  
Best Local Similarity 98.6%; Pred. No. 0.042;  
Matches 760; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

```

Qy 1 GGGCCCTCGAGAAAAGATGTCGGGGGTTCAGGAGGCCCCCAAGAGCAATGCGCTTG 60
Db 1 GGGCCCTCGAGAAAAGATGTCGGGGGTTCAGGAGGCCCCCAAGAGCAATGCGCTTG 60
Qy 61 CAGGTGAGCTGAGAGTCCAGGCTCATTAAGTGAATCTTTCGCGGGGTCTCCCTCATC 120
Db 61 CAGGTGAGCTGAGAGTCCAGGCTCATTAAGTGAATCTTTCGCGGGGTCTCCCTCATC 120
Qy 121 CACCCCGAGTGGGTCTGACCGCCGCGGTGCTGGAGACCGGACGTCAAGAGTCTGGCC 180
Db 121 CACCCCGAGTGGGTCTGACCGCCGCGGTGCTGGAGACCGGACGTCAAGAGTCTGGCC 180
Qy 181 GGCCTCAGGGGTGCAACTGCGGGAGACGACCTTCACTACAGAGACCAAGTCTGCGGTG 240
Db 181 GGCCTCAGGGGTGCAACTGCGGGAGACGACCTTCACTACAGAGACCAAGTCTGCGGTG 240
Qy 241 AGCAGAGATCATGTGTGACACCAAGTTCACACCGCCGAGATGAGAGCGGACATTCGCGGTG 300
Db 241 AGCAGAGATCATGTGTGACACCAAGTTCACACCGCCGAGATGAGAGCGGACATTCGCGGTG 300
Qy 301 CTGAGAGCTGAGAGAGCCGGGTGAAGTCTCAGCCACGTCACACCGGTACCTTGCCTT 360
Db 301 CTGAGAGCTGAGAGAGCCGGGTGAAGTCTCAGCCACGTCACACCGGTACCTTGCCTT 360
Qy 361 GCTCAGAGACCTTCCCGCGGGAGATGCCGTGCTGGGTCACTGGCTGGGGCGATGTGGAC 420
Db 361 GCTCAGAGACCTTCCCGCGGGAGATGCCGTGCTGGGTCACTGGCTGGGGCGATGTGGAC 420
Qy 421 AATGATGAGCGGCTCCGACCGGCATTTCTCTGAAACAGAGTGAAGTCCCATATGGA 480
Db 421 AATGATGAGCGGCTCCGACCGGCATTTCTCTGAAACAGAGTGAAGTCCCATATGGA 480
Qy 481 AACCAATTTGTGACGCAAAATATACCACTTGGCGCTACACGGAAGACGACGTCCGCAATC 540
Db 481 AACCAATTTGTGACGCAAAATATACCACTTGGCGCTACACGGAAGACGACGTCCGCAATC 540
Qy 541 GTCCGTGACGACATGCTGTGTGCCGGGAAACACCGGAGGGAATCATGCGGCGCATCTCC 600
Db 541 GTCCGTGACGACATGCTGTGTGCCGGGAAACACCGGAGGGAATCATGCGGCGCATCTCC 600
Qy 601 GGAGAGGCGGCTGTGTGACAGGTGAATGCACTGTGCGGAGCGGGGTGTGACGCTGG 660
Db 601 GGAGAGGCGGCTGTGTGACAGGTGAATGCACTGTGCGGAGCGGGGTGTGACGCTGG 660
Qy 661 GGCGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCTACACCGGTGCACTACTACTTG 720
Db 661 GGCGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCTACACCGGTGCACTACTACTTG 720
Qy 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771
Db 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771

```

RESULT 9  
US-09-598-982C-42  
Sequence 42, Application US/09598982C

GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffett, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SBO ID NO 42  
LENGTH: 771  
TYPE: DNA

ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-42

Query Match 97.7%; Score 753.4; DB 1; Length 771;  
Best Local Similarity 98.6%; Pred. No. 0.042;  
Matches 760; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

```
QY 1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTAGGCTTGAAGATCCAGGCGCATCTGGATCACTTCTGCGGGGCTCCCTCATC 120
DB 61 CAGGTAGGCTTGAAGATCCAGGCGCATCTGGATCACTTCTGCGGGGCTCCCTCATC 120
QY 121 CACCCCACTGGGTGTGACCGCGGGGTGCTGTTGGACCGGACGTCAAGATCTGGCC 180
DB 121 CACCCCACTGGGTGTGACCGCGGGGTGCTGTTGGACCGGACGTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTGCAACTGGGGAGCAGCACTCTACTACAGGACCAAGCTGCGCGGTG 240
DB 181 GGCCTCAGGGGTGCAACTGGGGAGCAGCACTCTACTACAGGACCAAGCTGCGCGGTG 240
QY 241 AGCAGGATCATGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
DB 241 AGCAGGATCATGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
QY 301 CTGAGCTGAGAGAGCGCGGTGAAGTCTCAAGCAAGTCAACAGGTCACTTCCCTCCCT 360
DB 301 CTGAGCTGAGAGAGCGCGGTGAAGTCTCAAGCAAGTCAACAGGTCACTTCCCTCCCT 360
QY 361 GCCTCAGAGACCTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGAGGAGATGAGAC 420
DB 361 GCCTCAGAGACCTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGAGGAGATGAGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAAGAGTGAAGTCCCATATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAAGAGTGAAGTCCCATATGAA 480
QY 481 AACCAATTGTGAGCGCAAAATACCACTTGGCGCTTACACGGGAGACGATCCGCAATC 540
DB 481 AACCAATTGTGAGCGCAAAATACCACTTGGCGCTTACACGGGAGACGATCCGCAATC 540
QY 541 GTCCGTGAGCAGATGCTGTGTGCGGGAAACCCCGAGGGACTCATGCCAAGAGACGCC 600
DB 541 GTCCGTGAGCAGATGCTGTGTGCGGGAAACCCCGAGGGACTCATGCCAAGAGACGCC 600
QY 601 GAGAGGCCCCGTGGTGTGCAAGGTGACCTGGCTGACAGCGGGCGTGTCAAGCTGG 660
DB 601 GAGAGGCCCCGTGGTGTGCAAGGTGACCTGGCTGACAGCGGGCGTGTGTCAAGCTGG 660
QY 661 GGGAGAGGCTGTGGCCAGCCAAACCGGCTGTGATTAACCCGTGTCACTACTACTTG 720
DB 661 GGGAGAGGCTGTGGCCAGCCAAACCGGCTGTGATTAACCCGTGTGTCACTACTACTTG 720
QY 721 GACTGTATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCTGTGT 771
DB 721 GACTGTATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCTGTGT 771

RESULT 10
US-09-598-982C-10
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafileit, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
```

CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 10  
LENGTH: 735  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (1)..(735)  
US-09-598-982C-10

Query Match 94.5%; Score 728.6; DB 1; Length 735;  
Best Local Similarity 99.5%; Pred. No. 0.056;  
Matches 731; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
QY 19 ATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGGCAGGTGAGCTTGAAGTGC 78
DB 1 ATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGGCAGGTGAGCTTGAAGTGC 78
QY 79 CACGCGCCATATCTGATGACCTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGGTGCTG 138
DB 79 CACGCGCCATATCTGATGACCTTCTGCGGGGCTCCCTCATCCACCCCAAGTGGGTGCTG 138
QY 139 ACCGCGCGGGGTGCTGGGAGACCGGACGTCAAGATCTGGCCCGCTTCAAGGAGTCAACTG 198
DB 139 ACCGCGCGGGGTGCTGGGAGACCGGACGTCAAGATCTGGCCCGCTTCAAGGAGTCAACTG 198
QY 199 CGGAGACGACCTTACTTACAGAGACCAAGTCTGCGCGGTCAAGAGATCATGTGTGAC 258
DB 199 CGGAGACGACCTTACTTACAGAGACCAAGTCTGCGCGGTCAAGAGATCATGTGTGAC 258
QY 259 CGGAGACGACCTTACTTACAGAGACCAAGTCTGCGCGGTCAAGAGATCATGTGTGAC 240
DB 259 CGGAGACGACCTTACTTACAGAGACCAAGTCTGCGCGGTCAAGAGATCATGTGTGAC 240
QY 318 CCAAGTCTTCAACCGCCCAAGTCCAGTCAAGTCCCTGCTGCTGCTGCTGCTGCTGCTGCTG 378
DB 318 CCAAGTCTTCAACCGCCCAAGTCCAGTCAAGTCCCTGCTGCTGCTGCTGCTGCTGCTGCTG 378
QY 379 CGGAGAGTCCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 438
DB 379 CGGAGAGTCCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 438
QY 439 CGGAGAGTCCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
DB 439 CGGAGAGTCCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
QY 498 CCGCATTTCTCTGAGCAGGTGAAGTCCCATATGAAACCAACTTTGTGACGCA 498
DB 498 CCGCATTTCTCTGAGCAGGTGAAGTCCCATATGAAACCAACTTTGTGACGCA 498
QY 558 AAATACCACTTGGGCTTACACCGGAGACGAGTCCGATCGTCCGTGACGACATGCTG 558
DB 558 AAATACCACTTGGGCTTACACCGGAGACGAGTCCGATCGTCCGTGACGACATGCTG 558
QY 618 TGTGCGGAGAACCCCGAGGAGCTCATGCAAGGAGCACTCCGAGAGGCCCCCTGTGTGTC 618
DB 618 TGTGCGGAGAACCCCGAGGAGCTCATGCAAGGAGCACTCCGAGAGGCCCCCTGTGTGTC 618
QY 678 AAGGTGAATGGACCTGTGCTGAGGCGGGCGTGGTCACTGAGGAGAGGCTGTGTCAG 678
DB 678 AAGGTGAATGGACCTGTGCTGAGGCGGGCGTGGTCACTGAGGAGAGGCTGTGTCAG 678
QY 738 CCAACCGGCTGTGATCTACACCGGTGTCACTACTTGAAGTGTGATCAACCATAT 738
DB 738 CCAACCGGCTGTGATCTACACCGGTGTCACTACTTGAAGTGTGATCAACCATAT 738
QY 753 GTCCCAAAAAGCCG 753
DB 753 GTCCCAAAAAGCCG 753

RESULT 11
```





```

; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

```

```

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTCATCCAGTATGGGCGCTGACTCTCAAGCTCCAGCGGCG 54
    |||||
QY 61 CAGGTAGCTGAGATGCCAGGCGCCATCTGATGCATCTTCGGGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTCCTTTCTCGAGGGGGCC 1
    |||||

```

```

RESULT 15
US-09-598-982C-24/c
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24

```

```

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTCATCCAGTATGGGCGCTGACTCTCAAGCTCCAGCGGCG 54
    |||||
QY 61 CAGGTAGCTGAGATGCCAGGCGCCATCTGATGCATCTTCGGGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTCCTTTCTCGAGGGGGCC 1
    |||||

```

```

RESULT 16
US-09-598-982C-26/c
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15

```

```

; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

```

```

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTCATCCAGTATGGGCGCTGACTCTCAAGCTCCAGCGGCG 54
    |||||
QY 61 CAGGTAGCTGAGATGCCAGGCGCCATCTGATGCATCTTCGGGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTCCTTTCTCGAGGGGGCC 1
    |||||

```

```

RESULT 17
US-09-598-982C-38/c
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

```

```

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTCATCCAGTATGGGCGCTGACTCTCAAGCTCCAGCGGCG 54
    |||||
QY 61 CAGGTAGCTGAGATGCCAGGCGCCATCTGATGCATCTTCGGGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTCCTTTCTCGAGGGGGCC 1
    |||||

```

```

RESULT 18
US-09-598-982C-40/c
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C

```

```

; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patent version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-40

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCCCTGAGAAAAGATCGTGGGGGTGAGAGAGCCCGGAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGCAGAGATGCAATTCAGATGAGGCGGTGACTCTCAGGCTCACTGCCAGGAC 54
Qy 61 CAGGTGAGCCTGAGAGTCCAGGCGCCATCTGATGCACTTCTGCGGGGGCTC 113
Db 53 CACTTGCTCTGAGGGGCTCTGAGACCCCGAGAGATCTTTCTCGAGGGGGCC 1

```

RESULT 19

```

US-09-598-982C-42/c
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Miles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patent version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-42

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCCCTGAGAAAAGATCGTGGGGGTGAGAGAGCCCGGAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGCAGAGATGCAATTCAGATGAGGCGGTGACTCTCAGGCTCACTGCCAGGAC 54
Qy 61 CAGGTGAGCCTGAGAGTCCAGGCGCCATCTGATGCACTTCTGCGGGGGCTC 113
Db 53 CACTTGCTCTGAGGGGCTCTGAGACCCCGAGAGATCTTTCTCGAGGGGGCC 1

```

RESULT 20

```

US-09-598-982C-10/c
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Miles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

```

```

; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patent version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
; US-09-598-982C-10

```

```

Query Match      3.6%; Score 27.6; DB 1; Length 735;
Best Local Similarity 45.4%; Pred. No. 18;
Matches 99; Conservative 0; Mismatches 119; Indels 0; Gaps 0;

```

```

Qy 49 AAGTGGCCCTGAGAGTGAAGTCCAGGCGCCATCTGATGCACTTCTGCCGG 108
Db 248 AACTGTGGGTGACAGATGATCTGCTGACCGGAGAGAGTGTCTGTAGAGGTGC 189
Qy 109 GGCCTCCCTCATCCACCCCGAGTGGTGTGACCGCGGGGGTGGAGACCGAGCTC 168
Db 188 TGCTCCGCGATGACCTTGAAGGAGGCGCCAGATCTTGAAGTCCGATCCAGCAATGC 129
Qy 169 AAGATGTGGCGGCTTGAAGGTGCACTGCGGAGAGAGAGCACTTACTACAGAGCCAG 228
Db 128 GCTGGGTGACACACCACTGAGGGGTGATGAGGAGAGCCCGGAGAGTGCATCCAGTAT 69
Qy 229 CTGCTCCGCTGACAGAGATGATGTCGACCCCAAGTT 266
Db 68 GGGCGGTGACTCTCAGGCTCAGCTGCGAGGGGCACTT 31

```

Search completed: August 26, 2005, 12:32:28  
Job time : 3.81314 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 26, 2005, 12:31:55 ; Search time 2.81314 Seconds  
(without alignments)  
4.206 Million cell updates/sec

Title: US-09-598-982C-22  
Perfect score: 771  
Sequence: 1 gggccctcgagaagaat.....cgtgaagcgcgccgctcgt 771

Scoring table: IDENTITY NUC  
Gapop 10.0, Gapext 0.5

Searched: 10 segs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,

and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	* Match	Length	DB	ID	Description
1	771	100.0	771	1	US-09-598-982C-22	Sequence 22, Appl
2	769.4	99.8	771	1	US-09-598-982C-38	Sequence 38, Appl
3	767.8	99.6	771	1	US-09-598-982C-8	Sequence 8, Appl
4	761.4	98.8	771	1	US-09-598-982C-20	Sequence 20, Appl
5	759.8	98.5	771	1	US-09-598-982C-36	Sequence 36, Appl
6	758.2	98.3	771	1	US-09-598-982C-24	Sequence 24, Appl
7	758.2	98.3	771	1	US-09-598-982C-26	Sequence 26, Appl
8	756.6	98.1	771	1	US-09-598-982C-40	Sequence 40, Appl
9	756.6	98.1	771	1	US-09-598-982C-42	Sequence 42, Appl
10	731.8	94.9	735	1	US-09-598-982C-10	Sequence 10, Appl
11	28.2	3.7	771	1	US-09-598-982C-8	Sequence 8, Appl
12	28.2	3.7	771	1	US-09-598-982C-20	Sequence 20, Appl
13	28.2	3.7	771	1	US-09-598-982C-22	Sequence 22, Appl
14	28.2	3.7	771	1	US-09-598-982C-24	Sequence 24, Appl
15	28.2	3.7	771	1	US-09-598-982C-26	Sequence 26, Appl
16	28.2	3.7	771	1	US-09-598-982C-36	Sequence 36, Appl
17	28.2	3.7	771	1	US-09-598-982C-38	Sequence 38, Appl
18	28.2	3.7	771	1	US-09-598-982C-40	Sequence 40, Appl
19	28.2	3.7	771	1	US-09-598-982C-42	Sequence 42, Appl
20	24.2	3.1	735	1	US-09-598-982C-10	Sequence 10, Appl

## ALIGNMENTS

RESULT 1  
US-09-598-982C-22  
; Sequence 22, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Miles, Andrew  
; APPLICANT: Mafelc, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 22  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-22

Query Match 100.0%; Score 771; DB 1; Length 771;  
Best Local Similarity 100.0%; Pred. No. 0.037;  
Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCGAGCAAGTGGCCCTTG 60  
DB 1 GGGCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCGAGCAAGTGGCCCTTG 60  
QY 61 CAGGTAGCCTGAGAGTCCAGGCGCACTGATGCACTTTCGCGGGGCTCCCTCATC 120  
DB 61 CAGGTAGCCTGAGAGTCCAGGCGCACTGATGCACTTTCGCGGGGCTCCCTCATC 120  
QY 121 CACCCCAAGTGGGTGCTGACCGCAGCGCACTGCGTGGAGCCGAGACGTCAAGATCTGGCC 180  
DB 121 CACCCCAAGTGGGTGCTGACCGCAGCGCACTGCGTGGAGCCGAGACGTCAAGATCTGGCC 180

QY 181 GCCCTCAGGGTGCACCTCGGGAGGAGCACTCTTACTACAGAGCAAGCTGTGCGGGT 240  
DB 181 GCCCTCAGGGTGCACCTCGGGAGGAGCACTCTTACTACAGAGCAAGCTGTGCGGGT 240  
QY 241 AGCAGATCATGTGACCACTGATTCACACCGCCAGATCGAGCGGCAATCGCCCTG 300  
DB 241 AGCAGATCATGTGACCACTGATTCACACCGCCAGATCGAGCGGCAATCGCCCTG 300  
QY 301 CTGAGCTGAGAGACCGGTGAGAGGTCTCAGCCACGTCCACACGTCACCTGCCCCCT 360  
DB 301 CTGAGCTGAGAGACCGGTGAGAGGTCTCAGCCACGTCCACACGTCACCTGCCCCCT 360  
QY 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGAGTCTGAGTCTGAGTCTGAGT 420  
DB 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGAGTCTGAGTCTGAGTCTGAGT 420  
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAAGAGTGAAGTCCCATATGAA 480  
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAAGAGTGAAGTCCCATATGAA 480  
QY 481 AACCAATTGTCAGCAAAATACCACTTGGGCTTACACGGAGACGACGTCCGATC 540  
DB 481 AACCAATTGTCAGCAAAATACCACTTGGGCTTACACGGAGACGACGTCCGATC 540  
QY 541 GTCCGTGACAGATCTGTGTCGGGAAACCCGGAGAGGACTATGCGAGCGACCTCC 600  
DB 541 GTCCGTGACAGATCTGTGTCGGGAAACCCGGAGAGGACTATGCGAGCGACCTCC 600  
QY 601 GAGAGGCGCTGTGTGCAAGTGAATGGACCTGCTGACAGCGGCGGTGTGAGCTGG 660  
DB 601 GAGAGGCGCTGTGTGCAAGTGAATGGACCTGCTGACAGCGGCGGTGTGAGCTGG 660  
QY 661 GCGAGGGCTGTGCCAGCCCAACCGGCTTGATCTACACCGGTGTGAGCTGG 720  
DB 661 GCGAGGGCTGTGCCAGCCCAACCGGCTTGATCTACACCGGTGTGAGCTGG 720  
QY 721 GACTGATTCACACTATGTCCCAAAAAGCGTGAAGCGGCGCGCTGT 771  
DB 721 GACTGATTCACACTATGTCCCAAAAAGCGTGAAGCGGCGCGCTGT 771

RESULT 2  
US-09-598-982C-38  
; Sequence 38, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Miles, Andrew  
; APPLICANT: Mafelc, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 38  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-38

Query Match 99.8%; Score 769.4; DB 1; Length 771;  
Best Local Similarity 99.9%; Pred. No. 0.037; 1; Indels 0; Gaps 0;  
Matches 770; Conservative 0; Mismatches 1;

QY 1 GGGCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCGAGCAAGTGGCCCTTG 60  
DB 1 GGGCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCGAGCAAGTGGCCCTTG 60

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QY 61 CAGTGAAGCTGAGATGCCAGGCGCCATATCTGGAATGCACTTCTGAGGGGGCTCCCTCATC 120
DB 61 CAGTGAAGCTGAGATGCCAGGCGCCATATCTGGAATGCACTTCTGAGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGAGTCAAGAGTCTGAGC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGAGTCAAGAGTCTGAGC 180
QY 181 GCCCTCAGGGGTCAACTGCGGAGAGCACTTCTACTACAGAGACCAAGTCTGCGCGCTC 240
DB 181 GCCCTCAGGGGTCAACTGCGGAGAGCACTTCTACTACAGAGACCAAGTCTGCGCGCTC 240
QY 241 AGCAGATCATGTGTCACCAAGATTCTACACCGCCAGATGAGAGCGGCAATGCCCTG 300
DB 241 AGCAGATCATGTGTCACCAAGATTCTACACCGCCAGATGAGAGCGGCAATGCCCTG 300
QY 301 CTGAGACTGAGAGAGCGGAGTGAAGGTCTCAGCCACAGTCAACAGGTCACTGCGCCCT 360
DB 301 CTGAGACTGAGAGAGCGGAGTGAAGGTCTCAGCCACAGTCAACAGGTCACTGCGCCCT 360
QY 361 GCCTCAGAGACTTCCCTCCCGGAGATGCCGTGAGTCACTGCGTGGGCGATGTGAC 420
DB 361 GCCTCAGAGACTTCCCTCCCGGAGATGCCGTGAGTCACTGCGTGGGCGATGTGAC 420
QY 421 AATGATGAGCGGCTCCCAACCGGCAATTTCTCTGAGAGAGAGTGAAGTCCCAATATGAA 480
DB 421 AATGATGAGCGGCTCCCAACCGGCAATTTCTCTGAGAGAGAGTGAAGTCCCAATATGAA 480
QY 481 AACCAATTGTTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGAGACAGTCCGCATC 540
DB 481 AACCAATTGTTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGAGACAGTCCGCATC 540
QY 541 GTCCGTGACGACATGTGTGTGCGCGGAAACACCGGAGGAACTCATGCCAGGCGCATCC 600
DB 541 GTCCGTGACGACATGTGTGTGCGCGGAAACACCGGAGGAACTCATGCCAGGCGCATCC 600
QY 601 GGAAGGGCCCCGTGTGTGAGAGGTGAATGGCACCTGGCTGACAGCGCGGTGTCAAGCTGG 660
DB 601 GGAAGGGCCCCGTGTGTGAGAGGTGAATGGCACCTGGCTGACAGCGCGGTGTCAAGCTGG 660
QY 661 GGCAGGGGCTGTGCGCAGGCCAACCGGCTGGCATCTACACCGGTGTCACTACTACTTG 720
DB 661 GGCAGGGGCTGTGCGCAGGCCAACCGGCTGGCATCTACACCGGTGTCACTACTACTTG 720
QY 721 GACTGATTCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCTGTGT 771
DB 721 GACTGATTCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCTGTGT 771

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RESULT 3
US-09-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendsch, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO: 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)

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US-09-598-982C-8
Query Match 99.6%; Score 767.8; DB 1; Length 771;
Best Local Similarity 99.7%; Pred. No. 0.038;
Matches 769; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GGGCCCCCTGAGAAAGATGTCGGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTTG 60
DB 1 GGGCCCCCTGAGAAAGATGTCGGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTTG 60
QY 61 CAGTGAAGCTGAGATGCCAGGCGCCATATCTGGAATGCACTTCTGAGGGGGCTCCCTCATC 120
DB 61 CAGTGAAGCTGAGATGCCAGGCGCCATATCTGGAATGCACTTCTGAGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGAGTCAAGAGTCTGAGC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGAGTCAAGAGTCTGAGC 180
QY 181 GCCCTCAGGGGTCAACTGCGGAGAGCACTTCTACTACAGAGACCAAGTCTGCGCGCTC 240
DB 181 GCCCTCAGGGGTCAACTGCGGAGAGCACTTCTACTACAGAGACCAAGTCTGCGCGCTC 240
QY 241 AGCAGATCATGTGTCACCAAGATTCTACACCGCCAGATGAGAGCGGCAATGCCCTG 300
DB 241 AGCAGATCATGTGTCACCAAGATTCTACACCGCCAGATGAGAGCGGCAATGCCCTG 300
QY 301 CTGAGACTGAGAGAGCGGAGTGAAGGTCTCAGCCACAGTCAACAGGTCACTGCGCCCT 360
DB 301 CTGAGACTGAGAGAGCGGAGTGAAGGTCTCAGCCACAGTCAACAGGTCACTGCGCCCT 360
QY 361 GCCTCAGAGACTTCCCTCCCGGAGATGCCGTGAGTCACTGCGTGGGCGATGTGAC 420
DB 361 GCCTCAGAGACTTCCCTCCCGGAGATGCCGTGAGTCACTGCGTGGGCGATGTGAC 420
QY 421 AATGATGAGCGGCTCCCAACCGGCAATTTCTCTGAGAGAGTGAAGTCCCAATATGAA 480
DB 421 AATGATGAGCGGCTCCCAACCGGCAATTTCTCTGAGAGAGTGAAGTCCCAATATGAA 480
QY 481 AACCAATTGTTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGAGACAGTCCGCATC 540
DB 481 AACCAATTGTTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGAGACAGTCCGCATC 540
QY 541 GTCCGTGACGACATGTGTGTGCGCGGAAACACCGGAGGAACTCATGCCAGGCGCATCC 600
DB 541 GTCCGTGACGACATGTGTGTGCGCGGAAACACCGGAGGAACTCATGCCAGGCGCATCC 600
QY 601 GGAAGGGCCCCGTGTGTGAGAGGTGAATGGCACCTGGCTGACAGCGCGGTGTCAAGCTGG 660
DB 601 GGAAGGGCCCCGTGTGTGAGAGGTGAATGGCACCTGGCTGACAGCGCGGTGTCAAGCTGG 660
QY 661 GGCAGGGGCTGTGCGCAGGCCAACCGGCTGGCATCTACACCGGTGTCACTACTACTTG 720
DB 661 GGCAGGGGCTGTGCGCAGGCCAACCGGCTGGCATCTACACCGGTGTCACTACTACTTG 720
QY 721 GACTGATTCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCTGTGT 771
DB 721 GACTGATTCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCTGTGT 771

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RESULT 4
US-09-598-982C-20
; Sequence 20, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendsch, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15

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; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-20
```

```
Query Match      98.8%; Score 761.4; DB 1; Length 771;
Best Local Similarity 99.2%; Pred. No. 0.04;
Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
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```
QY 1 GGGCCCCCTCGAGAAAAGAAATCGTCGGGGGTCAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
Db 1 GGGCCCCCTCGAGAAAAGAAATCGTCGGGGGTCAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGAGTCCACCGGCCCATCTGAGATGCACTTTCGCGGGGCTCCCTCATC 120
Db 61 CAGGTGAGCCTGAGAGTCCACCGGCCCATCTGAGATGCACTTTCGCGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGCTGACCGGACGCGCATCTGCTGGACCCGACCTCAAGATCTGGCC 180
Db 121 CACCCCGAGTGGGTGCTGACCGGACGCGCATCTGCTGGACCCGACCTCAAGATCTGGCC 180
QY 181 GGCCTCAGAGGTGCACTGCGGGAGAGCACTCTACACAGGACCGAGCTGCGCCGTC 240
Db 181 GGCCTCAGAGGTGCACTGCGGGAGAGCACTCTACACAGGACCGAGCTGCGCCGTC 240
QY 241 AGCAGAGATCATCTGTGACCCCAAGTTCTACACCGCCCAAGTCGAGCGGCAATCGCCCTG 300
Db 241 AGCAGAGATCATCTGTGACCCCAAGTTCTACACCGCCCAAGTCGAGCGGCAATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGAGCCCGGTGAAGGTCTCCAGCCAGTCCACCGGTCAACCTGCCCCCT 360
Db 301 CTGAGAGCTGAGAGAGCCCGGTGAAGGTCTCCAGCCAGTCCACCGGTCAACCTGCCCCCT 360
QY 361 GCCTCAGAGACCTTCCCCCGGGGATGCGTGTGGGTCTAGGCTGAGGCGATGTGAGAC 420
Db 361 GCCTCAGAGACCTTCCCCCGGGGATGCGTGTGGGTCTAGGCTGAGGCGATGTGAGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGAA 480
Db 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGAA 480
QY 481 AACCACTTTGTGACGCAAAATACCACTTGGGCGCTTACACCGGAGACCAACGTCGCCATC 540
Db 481 AACCACTTTGTGACGCAAAATACCACTTGGGCGCTTACACCGGAGACCAACGTCGCCATC 540
QY 541 GTCCTGACAGCATGCTGTGTGCGGGAAACACCGGAGGAGCTCATGCCAGGCGCATCC 600
Db 541 GTCCTGACAGCATGCTGTGTGCGGGAAACACCGGAGGAGCTCATGCCAGGCGCATCC 600
QY 601 GAGAGGCCCCGTGTGTGCAAGTGAATGCACTGTGCTGAGGCGGGCGGTGTCAACTGG 660
Db 601 GAGAGGCCCCGTGTGTGCAAGTGAATGCACTGTGCTGAGGCGGGCGGTGTCAACTGG 660
QY 661 GGGAGAGGCTGTGTGCGGCAACCGGCTGAGCATCTACACCGGTGCACTTACTTGG 720
Db 661 GGGAGAGGCTGTGTGCGGCAACCGGCTGAGCATCTACACCGGTGCACTTACTTGG 720
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771
```

```
RESULT 5
US-09-598-982C-36
; Sequence 36, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
```

```
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-36
```

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Query Match      98.5%; Score 759.8; DB 1; Length 771;
Best Local Similarity 99.1%; Pred. No. 0.041;
Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
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QY 1 GGGCCCCCTCGAGAAAAGAAATCGTCGGGGGTCAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
Db 1 GGGCCCCCTCGAGAAAAGAAATCGTCGGGGGTCAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGAGTCCACCGGCCCATCTGAGATGCACTTTCGCGGGGCTCCCTCATC 120
Db 61 CAGGTGAGCCTGAGAGTCCACCGGCCCATCTGAGATGCACTTTCGCGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGCTGACCGGACGCGCATCTGCTGGACCCGACCTCAAGATCTGGCC 180
Db 121 CACCCCGAGTGGGTGCTGACCGGACGCGCATCTGCTGGACCCGACCTCAAGATCTGGCC 180
QY 181 GGCCTCAGAGGTGCACTGCGGGAGAGCACTCTACACAGGACCGAGCTGCGCCGTC 240
Db 181 GGCCTCAGAGGTGCACTGCGGGAGAGCACTCTACACAGGACCGAGCTGCGCCGTC 240
QY 241 AGCAGAGATCATCTGTGACCCCAAGTTCTACACCGCCCAAGTCGAGCGGCAATCGCCCTG 300
Db 241 AGCAGAGATCATCTGTGACCCCAAGTTCTACACCGCCCAAGTCGAGCGGCAATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGAGCCCGGTGAAGGTCTCCAGCCAGTCCACCGGTCAACCTGCCCCCT 360
Db 301 CTGAGAGCTGAGAGAGCCCGGTGAAGGTCTCCAGCCAGTCCACCGGTCAACCTGCCCCCT 360
QY 361 GCCTCAGAGACCTTCCCCCGGGGATGCGTGTGGGTCTAGGCTGAGGCGATGTGAGAC 420
Db 361 GCCTCAGAGACCTTCCCCCGGGGATGCGTGTGGGTCTAGGCTGAGGCGATGTGAGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGAA 480
Db 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGAA 480
QY 481 AACCACTTTGTGACGCAAAATACCACTTGGGCGCTTACACCGGAGACCAACGTCGCCATC 540
Db 481 AACCACTTTGTGACGCAAAATACCACTTGGGCGCTTACACCGGAGACCAACGTCGCCATC 540
QY 541 GTCCTGACAGCATGCTGTGTGCGGGAAACACCGGAGGAGCTCATGCCAGGCGCATCC 600
Db 541 GTCCTGACAGCATGCTGTGTGCGGGAAACACCGGAGGAGCTCATGCCAGGCGCATCC 600
QY 601 GAGAGGCCCCGTGTGTGCAAGTGAATGCACTGTGCTGAGGCGGGCGGTGTCAACTGG 660
Db 601 GAGAGGCCCCGTGTGTGCAAGTGAATGCACTGTGCTGAGGCGGGCGGTGTCAACTGG 660
QY 661 GGGAGAGGCTGTGTGCGGCAACCGGCTGAGCATCTACACCGGTGCACTTACTTGG 720
Db 661 GGGAGAGGCTGTGTGCGGCAACCGGCTGAGCATCTACACCGGTGCACTTACTTGG 720
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGGTGT 771
```

Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGGCGCCGCTGT 771

RESULT 6  
US-09-598-982C-24

Sequence 24, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffett, Mark  
APPLICANT: Haak-Frendach, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 24  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-24

Query Match 98.3%; Score 758.2; DB 1; Length 771;

Best Local Similarity 99.0%; Pred. No. 0.041; Mismatches 8; Indels 0; Gaps 0;

Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCTGCGGGGTGAGAGGCCCCCAGAGCAAGTGGCCTTG 60  
DB 1 GGGCCCCCTCGAGAAAAGATCTGCGGGGTGAGAGGCCCCCAGAGCAAGTGGCCTTG 60  
QY 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATCTGAGTCACTTTGGGGGGGCTCCCTCATC 120  
DB 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATCTGAGTCACTTTGGGGGGGCTCCCTCATC 120  
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGCTCAAGATCTGGCC 180  
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGCTCAAGATCTGGCC 180  
QY 181 GGCCTCAGGGTGAACCTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240  
DB 181 GGCCTCAGGGTGAACCTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240  
QY 241 AGCAGGATCATCTGTCACCCACAGTTCTACACCGCCAGATGGAGCGGCAATGCCCTG 300  
DB 241 AGCAGGATCATCTGTCACCCACAGTTCTACACCGCCAGATGGAGCGGCAATGCCCTG 300  
QY 301 CTGAGAGCTGAGAGCGCGGTGAAGGTCTCAGCAGCTCAACGGTCACTCCCTGCCCT 360  
DB 301 CTGAGAGCTGAGAGCGCGGTGAAGGTCTCAGCAGCTCAACGGTCACTCCCTGCCCT 360  
QY 361 GGCCTCAGAGACCTTCCCGCGGAGATCCGCTGCGGTCACTGGCTGGGGGATGTGAC 420  
DB 361 GGCCTCAGAGACCTTCCCGCGGAGATCCGCTGCGGTCACTGGCTGGGGGATGTGAC 420  
QY 421 AATGATGAGCGCTCCACCGGCAATTTCTCTGAAGCAGGTGAAGTCCCAATATGAA 480  
DB 421 AATGATGAGCGCTCCACCGGCAATTTCTCTGAAGCAGGTGAAGTCCCAATATGAA 480  
QY 481 AACCAATTGTGAGCAAAATATCACTTGGCGCTTACACGGGAGACGACGTCCGCATC 540  
DB 481 AACCAATTGTGAGCAAAATATCACTTGGCGCTTACACGGGAGACGACGTCCGCATC 540  
QY 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCCGAGGGAATCATGCCAGGCGCATC 600  
DB 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCCGAGGGAATCATGTCAAGGCGACG 600

QY 601 GAGGGCCCCCTGATGTCAGAGTGAATGACCTGCTGACAGCGCGGTGTGAGCTTG 660  
DB 601 GAGGACCTCTGTGTGTGTCAGAGTGAATGACCTGCTGACAGCGCGGTGTGAGCTTG 660  
QY 661 GCGAGGGCTGTGCGCCAGCGCCAGCGGCTGGCATCTACACCGTGTCACTACTTGG 720  
DB 661 GCGAGGGCTGTGCGCCAGCGCCAGCGGCTGGCATCTACACCGTGTCACTACTTGG 720  
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGGCGCCGCTGT 771  
DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGGCGCCGCTGT 771

RESULT 7  
US-09-598-982C-26

Sequence 26, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffett, Mark  
APPLICANT: Haak-Frendach, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 26  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-26

Query Match 98.3%; Score 758.2; DB 1; Length 771;

Best Local Similarity 99.0%; Pred. No. 0.041; Mismatches 8; Indels 0; Gaps 0;

Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCTGCGGGGTGAGAGGCCCCCAGAGCAAGTGGCCTTG 60  
DB 1 GGGCCCCCTCGAGAAAAGATCTGCGGGGTGAGAGGCCCCCAGAGCAAGTGGCCTTG 60  
QY 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATCTGAGTCACTTTGGGGGGGCTCCCTCATC 120  
DB 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATCTGAGTCACTTTGGGGGGGCTCCCTCATC 120  
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGCTCAAGATCTGGCC 180  
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTGCTGAGGACCGGAGCTCAAGATCTGGCC 180  
QY 181 GGCCTCAGGGTGAACCTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240  
DB 181 GGCCTCAGGGTGAACCTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240  
QY 241 AGCAGGATCATCTGTCACCCACAGTTCTACACCGCCAGATCGAGCGGCAATGCCCTG 300  
DB 241 AGCAGGATCATCTGTCACCCACAGTTCTACACCGCCAGATCGAGCGGCAATGCCCTG 300  
QY 301 CTGAGAGCTGAGAGCGCGGTGAAGGTCTCAGCAGCTCAACGGTCACTCCCTGCCCT 360  
DB 301 CTGAGAGCTGAGAGCGCGGTGAAGGTCTCAGCAGCTCAACGGTCACTCCCTGCCCT 360  
QY 361 GGCCTCAGAGACCTTCCCGCGGAGATCCGCTGCGGTCACTGGCTGGGGGATGTGAC 420  
DB 361 GGCCTCAGAGACCTTCCCGCGGAGATCCGCTGCGGTCACTGGCTGGGGGATGTGAC 420  
QY 421 AATGATGAGCGCTCCACCGGCAATTTCTCTGAAGCAGGTGAAGTCCCAATATGAA 480  
DB 421 AATGATGAGCGCTCCACCGGCAATTTCTCTGAAGCAGGTGAAGTCCCAATATGAA 480

```
QY 481 AACCAATTGTGACGCAAAATACACTTGGCGCTTACACGCGAGACGATGCGCATC 540
|
|
|
Db 481 AACCAATTGTGACGCAAAATACACTTGGCGCTTACACGCGAGACGATGCGCATC 540
|
|
|
QY 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGGAATCATGCCAGGCGCATCC 600
|
|
|
Db 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGGAATCATGCCAGGAGCGCC 600
|
|
|
QY 601 GGAGGGCCCCGTGTGTGCAAGGTGAATGGACCTGCGTGAAGGCGGCGGTGTCAGCTGG 660
|
|
|
Db 601 GGCGGACCACTGTGTGTGCAAGGTGAATGGACCTGCGTGAAGGCGGCGGTGTCAGCTGG 660
|
|
|
QY 661 GGCGAGGGCTGTGTGTCAGGCGCAACCGGCTGCGATCTACACCGGTGTCACTACTACTTG 720
|
|
|
Db 661 GGCGAGGGCTGTGTGTCAGGCGCAACCGGCTGCGATCTACACCGGTGTCACTACTACTTG 720
|
|
|
QY 721 GACTGATCCACCACTATGTGTCCCAAAAAGCCGTGAAGGGCGCGCTGTGT 771
|
|
|
Db 721 GACTGATCCACCACTATGTGTCCCAAAAAGCCGTGAAGGGCGCGCTGTGT 771
|
|
|
```

## RESULT 8

```
US-09-598-982C-40
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40
```

```
Query Match 98.1%; Score 756.6; DB 1; Length 771;
Best Local Similarity 98.8%; Pred. No. 0.042; Mismatches 9; Indels 0; Gaps 0;
Matches 762; Conservative 0;
```

```
QY 1 GGGCCCCCTGAGAAAAGATCTGTGGGGGTCAAGAGGCCCCAGAGCAAGTGGCCCTGG 60
|
|
|
Db 1 GGGCCCCCTGAGAAAAGATCTGTGGGGGTCAAGAGGCCCCAGAGCAAGTGGCCCTGG 60
|
|
|
QY 61 CAGGTGAGCTGAGAGTCCAGCGCCCATCTGATGATGACTTTCGGGGGCTCCCTCATC 120
|
|
|
Db 61 CAGGTGAGCTGAGAGTCCAGCGCCCATCTGATGATGACTTTCGGGGGCTCCCTCATC 120
|
|
|
QY 121 CACCCCCAGTGGGTGTCGACCGGACGCACTGCGTGGACCGGACCGTCAAGATGTGGCC 180
|
|
|
Db 121 CACCCCCAGTGGGTGTCGACCGGACGCACTGCGTGGACCGGACCGTCAAGATGTGGCC 180
|
|
|
QY 181 GCCCTCAGGTGCACTGCGGAGACGACCTCTACTACAGGACGACGCTGCGGATC 240
|
|
|
Db 181 GCCCTCAGGTGCACTGCGGAGACGACCTCTACTACAGGACGACGCTGCGGATC 240
|
|
|
QY 241 AGCAGATCATCTGTGACCAAGTTCTACACCGCCCAAGTGGAGCGGCAATGCGCTG 300
|
|
|
Db 241 AGCAGATCATCTGTGACCAAGTTCTACACCGCCCAAGTGGAGCGGCAATGCGCTG 300
|
|
|
QY 301 CTGAGCTGAGAGGCGGTGAAGGTCTCAAGCCACGTCCACAGGTCAACCTGCCCCCT 360
|
|
|
```

```
Db 301 CTGAGCTGAGAGGCGGTGAAGGTCTCTCAAGCCACGTCCACAGGTCAACCTGCCCCCT 360
|
|
|
QY 361 GCGTCAGAGACCTTCCCGCGGAGATGCGTGTGATCTACTGTGGGGGAGATGAGAC 420
|
|
|
Db 361 GCGTCAGAGACCTTCCCGCGGAGATGCGTGTGATCTACTGTGGGGGAGATGAGAC 420
|
|
|
QY 421 AATGATGAGCGCTTCCACCGGCATTTCTCTGAAGAGGTGAAGGTCCCATTAATGAA 480
|
|
|
Db 421 AATGATGAGCGCTTCCACCGGCATTTCTCTGAAGAGGTGAAGGTCCCATTAATGAA 480
|
|
|
QY 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTTACAGCGAGACGATGCGCATC 540
|
|
|
Db 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTTACAGCGAGACGATGCGCATC 540
|
|
|
QY 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGGAATCATGCCAGGCGCATCC 600
|
|
|
Db 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGGAATCATGCCAGGCGCATCC 600
|
|
|
QY 601 GGAGGGCCCCGTGTGTGCAAGGTGAATGGACCTGCGTGAAGGCGGCGGTGTCAGCTGG 660
|
|
|
Db 601 GGCGGACCTGTGTGTGCAAGGTGAATGGACCTGCGTGAAGGCGGCGGTGTCAGCTGG 660
|
|
|
QY 661 GGCGAGGGCTGTGTGTCAGGCGCAACCGGCTGCGATCTACACCGGTGTCACTACTACTTG 720
|
|
|
Db 661 GGCGAGGGCTGTGTGTCAGGCGCAACCGGCTGCGATCTACACCGGTGTCACTACTACTTG 720
|
|
|
QY 721 GACTGATCCACCACTATGTGTCCCAAAAAGCCGTGAAGGGCGCGCTGTGT 771
|
|
|
Db 721 GACTGATCCACCACTATGTGTCCCAAAAAGCCGTGAAGGGCGCGCTGTGT 771
|
|
|
```

## RESULT 9

```
US-09-598-982C-42
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42
```

```
Query Match 98.1%; Score 756.6; DB 1; Length 771;
Best Local Similarity 98.8%; Pred. No. 0.042; Mismatches 9; Indels 0; Gaps 0;
Matches 762; Conservative 0;
```

```
QY 1 GGGCCCCCTGAGAAAAGATCTGTGGGGGTCAAGAGGCCCCAGAGCAAGTGGGCCCTGG 60
|
|
|
Db 1 GGGCCCCCTGAGAAAAGATCTGTGGGGGTCAAGAGGCCCCAGAGCAAGTGGGCCCTGG 60
|
|
|
QY 61 CAGGTGAGCTGAGAGTCCAGCGCCCATCTGATGATGACTTTCGGGGGCTCCCTCATC 120
|
|
|
Db 61 CAGGTGAGCTGAGAGTCCAGCGCCCATCTGATGATGACTTTCGGGGGCTCCCTCATC 120
|
|
|
QY 121 CACCCCCAGTGGGTGTCGACCGGACGCACTGCGTGGACCGGACCGTCAAGATGTGGCC 180
|
|
|
Db 121 CACCCCCAGTGGGTGTCGACCGGACGCACTGCGTGGACCGGACCGTCAAGATGTGGCC 180
|
|
|
QY 181 GCCCTCAGGTGCACTGCGGAGACGACCTCTACTACAGGACCAAGTGTGCGCGATC 240
|
|
|
```



```

Db      ||| 181 GCGCTCAGGAGTCACTGCGGGAGAGACCTCTACTACAGAGACAGAGTGTGCGCGATC 240
Qy      ||| 241 AGCAGAGATCATGTGACCCCAAGTTTCTACACCGCCAGATGAGAGCGGCAATCGCCCTG 300
Db      ||| 241 ACCAGAGATCATGTGACCCCAAGTTTCTACACCGCCAGATGAGAGCGGCAATCGCCCTG 300
Qy      ||| 301 CTGAGAGCTGAGAGAGCGGAGTGAAGGTCTCAGCAGACGTCAACGGTCAACCGTCCCT 360
Db      ||| 301 CTGAGAGCTGAGAGAGCGGAGTGAAGGTCTCAGCAGACGTCAACGGTCAACCGTCCCT 360
Qy      ||| 361 GCGTCAAGAGACCTTCCCCCGGGAGATGCCGTGCGGTCACTGAGTGGGCGCATGTGAC 420
Db      ||| 361 GCGTCAAGAGACCTTCCCCCGGGAGATGCCGTGCGGTCACTGAGTGGGCGCATGTGAC 420
Qy      ||| 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAGACAGGTGAAGTCCCATTAATGAA 480
Db      ||| 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAGACAGGTGAAGTCCCATTAATGAA 480
Qy      ||| 481 AACCAATTGATGAGCGCAAAATTAACAACCTTGGCGCTTACACGGAGAGACAGTCCGATC 540
Db      ||| 481 AACCAATTGATGAGCGCAAAATTAACAACCTTGGCGCTTACACGGAGAGACAGTCCGATC 540
Qy      ||| 541 GTCCGTGACGACATGCTGTGTGCTCCGGGAAACACCGGAGGAACTCATGCGAGCGCATCC 600
Db      ||| 541 GTCCGTGACGACATGCTGTGTGCTCCGGGAAACACCGGAGGAACTCATGCGAGCGCATCC 600
Qy      ||| 601 GGAGGAGCGCTGTGTGTGCAAGGTGAATGACCTGCGCTGACAGCGGCGGTGTCAAGCTG 660
Db      ||| 601 GGAGGAGCGCTGTGTGTGCAAGGTGAATGACCTGCGCTGACAGCGGCGGTGTCAAGCTG 660
Qy      ||| 661 GCGAGGAGCGTGTGCCAGCGCAACCGGCGCTGACCTTACACCGGTGTCACTTAATCTTG 720
Db      ||| 661 GCGAGGAGCGTGTGCCAGCGCAACCGGCGCTGACCTTACACCGGTGTCACTTAATCTTG 720
Qy      ||| 721 GACTGATCACAACATATGTCCCAAAAAGCCGTGAGCGCGCGCTGTGT 771
Db      ||| 721 GACTGATCACAACATATGTCCCAAAAAGCCGTGAGCGCGCGCTGTGT 771

```

```

RESULT 10
US-09-598-982C-10
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendocho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

```

```

Query Match          94.9%; Score 731.8; DB 1; Length 735;
Best Local Similarity 99.7%; Pred. No. 0.056;
Matches 733; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy      ||| 19 ATGCTGCGGGGCTCAGAGGCGCCCGCAGAGCAAGTGGCCCTGGCAGGTGAGCTGAGATC 78
Db      ||| 1 ATGCTGCGGGGCTCAGAGGCGCCCGCAGAGCAAGTGGCCCTGGCAGGTGAGCTGAGATC 60

```

```

Qy      ||| 79 CACGCGCCATATGATGATGACCTTCTGCGGGGGCTCCCTCATTCACACCCCAAGTGGTGTG 138
Db      ||| 61 CACGCGCCATATGATGATGACCTTCTGCGGGGGCTCCCTCATTCACACCCCAAGTGGTGTG 120
Qy      ||| 139 ACCGAGCGGCACTGCGTGGGAGACCGGACGTCAAGATCTGGGCGCCCTCAGGGGTCAACTG 198
Db      ||| 121 ACCGAGCGGCACTGCGTGGGAGACCGGACGTCAAGATCTGGGCGCCCTCAGGGGTCAACTG 180
Qy      ||| 199 CGGAGAGCAGACCTTACTATACAGAGACCAAGCTGCTGCCGCTCAGAGATCATGTGTGAC 258
Db      ||| 181 CGGAGAGCAGACCTTACTATACAGAGACCAAGCTGCTGCCGCTCAGAGATCATGTGTGAC 240
Qy      ||| 259 CCAAGTTCTTACACCGCCAGATGCGAGCGGCAATCGCCCTGCTGAGACTGAGAGAGCG 318
Db      ||| 241 CCAAGTTCTTACACCGCCAGATGCGAGCGGCAATCGCCCTGCTGAGACTGAGAGAGCG 300
Qy      ||| 319 GTGAAGTCTTCAAGCAGTCAACAGGTCAACCTGCCCCCTGCTCAGAGACCTTCCCG 378
Db      ||| 301 GTGAAGTCTTCAAGCAGTCAACAGGTCAACCTGCCCCCTGCTCAGAGACCTTCCCG 360
Qy      ||| 379 CCGGAGATGCGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 438
Db      ||| 361 CCGGAGATGCGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
Qy      ||| 439 CGGCAATTCTCTGAGACAGGTGAAGGTCCCATTAATGAAACCAATTGTTGACGCA 498
Db      ||| 421 CGGCAATTCTCTGAGACAGGTGAAGGTCCCATTAATGAAACCAATTGTTGACGCA 480
Qy      ||| 499 AATATCACCTTGGCGCTTACACCGGAGACAGACGTCCGATCTGCTCGTGAAGCATGTG 558
Db      ||| 481 AATATCACCTTGGCGCTTACACCGGAGACAGACGTCCGATCTGCTCGTGAAGCATGTG 540
Qy      ||| 559 TGTGCGGGGAAACACCGGAGGAACTCATGCAAGGGCACTCCGAGGGCCCTGTGTGTC 618
Db      ||| 541 TGTGCGGGGAAACACCGGAGGAACTCATGCAAGGGCACTCCGAGGGCCCTGTGTGTC 600
Qy      ||| 619 AAGGTGAATGACACCTGCTGACAGCGGGCGGTGATGAGCTGGGGGAGAGGCTGTGCCAG 678
Db      ||| 601 AAGGTGAATGACACCTGCTGACAGCGGGCGGTGATGAGCTGGGGGAGAGGCTGTGCCAG 660
Qy      ||| 679 CCGAACCGGCTGCGATCTACACCGCGTGTCACTACTACTTGTGAATGACCACTAT 738
Db      ||| 661 CCGAACCGGCTGCGATCTACACCGCGTGTCACTACTACTTGTGAATGACCACTAT 720
Qy      ||| 739 GTCCCAAAAAGCGG 753
Db      ||| 721 GTCCCAAAAAGCGG 735

```

```

RESULT 11
US-09-598-982C-8/c
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendocho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-8

```

```

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGACAGAGGCCCCCGAGGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGAGCTCTCAGGCTCACCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATACTGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCC 1

RESULT 12
US-09-598-982C-20/c
; Sequence 20, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-20

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGACAGAGGCCCCCGAGGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGAGCTCTCAGGCTCACCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATACTGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCC 1

RESULT 13
US-09-598-982C-22/c
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:

```

```

; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGACAGAGGCCCCCGAGGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGAGCTCTCAGGCTCACCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATACTGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCC 1

RESULT 14
US-09-598-982C-24/c
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGACAGAGGCCCCCGAGGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCCCTGAGCTCTCAGGCTCACCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATACTGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCC 1

RESULT 15
US-09-598-982C-26/c
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 26
; LENGTH: 771

```

```

; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGAGAAAGTGCATGATGAGCGCGGTGACTCTAGGCTGACCTGCCAGGGC 54
Qy 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATGACTGATGCACTTTGCGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

```

```

RESULT 16
US-09-598-982C-36/c

```

```

; Sequence 36, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-36

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGAGAAAGTGCATGATGAGCGCGGTGACTCTAGGCTGACCTGCCAGGGC 54
Qy 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATGACTGATGCACTTTGCGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

```

```

RESULT 17
US-09-598-982C-38/c

```

```

; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52

```

```

; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGAGAAAGTGCATGATGAGCGCGGTGACTCTAGGCTGACCTGCCAGGGC 54
Qy 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATGACTGATGCACTTTGCGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

```

```

RESULT 18
US-09-598-982C-40/c

```

```

; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGAGAAAGTGCATGATGAGCGCGGTGACTCTAGGCTGACCTGCCAGGGC 54
Qy 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATGACTGATGCACTTTGCGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

```

```

RESULT 19
US-09-598-982C-42/c

```

```

; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21

```

```

; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42

```

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```

```

Qy 1 GGGCCCCCGAGAAAAGATCGTCGGGGGTGAGAGAGCCCCCGAGAGCAAGTGGCCCTG 60
Db 113 GAGCCCCCGAGAGAGTGCATTCAGTATGGGCGTGAAGCTTCAGGCTCAGCCAGAGG 54
Qy 61 CAGTGAAGCTTGAAGTCCAGGCGCACTAGTGAATGCACTTTCGGGGGCTC 113
Db 53 CACTGCTCTGGGGGCTCTCTGACCCCGACCAATCTTTCTCGAGGGGCC 1

```

```

RESULT 20
US-09-598-982C-10/c
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilet, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

```

```

Query Match      3.1%; Score 24.2; DB 1; Length 735;
Best Local Similarity 52.8%; Pred. No. 18;
Matches 94; Conservative 0; Mismatches 78; Indels 6; Gaps 2;

```

```

Qy 297 CCGTCTGAGAGCTGAGAGAGCGCGTGAAGTCTTCAGACCAAGTCCACAGGTCACCTGCC 356
Db 442 CCGTCTGAGAGAAATGCGGTGGAGGCGCTCATCATGTCACA---TCGCCCCAGC 386
Qy 357 CCGTCTGAGAGAGCTTCCCGCGGGAGTCCGTCGTGCTGCTGAGGAGGCGA--- 413
Db 385 CAGTGAAGCCAGACAGGATCCCGGGGGAAGTCTCTGAGGAGGAGGAGGAGTACCG 326
Qy 414 TGTGACATATGATGAGCGCTCCACCGCATTTCTCTGAACAGAGTGAAGTCCCC 471
Db 325 TGTGACATGCTGAGAGACTTCAAGGCTCTCTCAAGTCCAGAGGAGGAGTCTCCG 268

```

Search completed: August 26, 2005, 12:32:29  
 Job time : 3.81314 secs

GenCore version 5.1.6  
 Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model  
 Run on: August 26, 2005, 12:31:55 ; Search time 2.81314 Seconds  
 (without alignments)  
 4.206 Million cell updates/sec

Title: US-09-598-982C-24  
 Perfect score: 771  
 Sequence: 1 gggcccccggagaaagat.....cgtgaagggcgccgcgtcgt 771

Scoring table: IDENTITY\_NUC  
 Gapop 10.0 , Gapext 0.5  
 Searched: 10 seqs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
 Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
 Listing first 200 summaries

Database : US09598982C\_rev.seq:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	771	100.0	771	1	US-09-598-982C-24
2	769.4	99.8	771	1	US-09-598-982C-40
3	766.2	99.4	771	1	US-09-598-982C-26
4	764.6	99.2	771	1	US-09-598-982C-42
5	761.4	98.8	771	1	US-09-598-982C-22
6	758.2	98.3	771	1	US-09-598-982C-38
7	756.6	98.1	771	1	US-09-598-982C-32
8	755	97.9	771	1	US-09-598-982C-20
9	753.4	97.7	771	1	US-09-598-982C-36
10	725.4	94.1	735	1	US-09-598-982C-10
11	28.2	3.7	771	1	US-09-598-982C-8
12	28.2	3.7	771	1	US-09-598-982C-20
13	28.2	3.7	771	1	US-09-598-982C-22
14	28.2	3.7	771	1	US-09-598-982C-24
15	28.2	3.7	771	1	US-09-598-982C-26
16	28.2	3.7	771	1	US-09-598-982C-32
17	28.2	3.7	771	1	US-09-598-982C-38
18	28.2	3.7	771	1	US-09-598-982C-40
19	28.2	3.7	771	1	US-09-598-982C-42
20	27.2	3.5	735	1	US-09-598-982C-10

## ALIGNMENTS

```

RESULT 1
US-09-598-982C-24
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilet, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C

```

```

; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-24

```

```

Query Match      100.0%; Score 771; DB 1; Length 771;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTTG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTTG 60
QY 61 CAGGTGAGCTTGAAGTCCAGCGCCCAATCTGATGCACTTCTCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAAGTCCAGCGCCCAATCTGATGCACTTCTCGGGGGCTCCCTCATC 120
QY 121 CACCCCAATGGGTGTGACCGGACGGCACTGCGTGGGACCGGAGCTCAAGATCTGGCC 180
DB 121 CACCCCAATGGGTGTGACCGGACGGCACTGCGTGGGACCGGAGCTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTCGGCTC 240
DB 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTCGGCTC 240
QY 241 AGCAGATCATGTGACCCCAAGTTTACACCGCCAGATGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGACCCCAAGTTTACACCGCCAGATGAGCGGACATCGCCCTG 300
QY 301 CTGAGCTGAGAGAGCGGGTGAAGGTCTCAAGCAAGTCAAGCTGACCTTGGCCCT 360
DB 301 CTGAGCTGAGAGAGCGGGTGAAGGTCTCAAGCAAGTCAAGCTGACCTTGGCCCT 360
QY 361 GGCCTCAGAGACCTTCCCCCGGGAGTCCGTCTGGGTCACTGCTGGGGCGATGTGAC 420
DB 361 GGCCTCAGAGACCTTCCCCCGGGAGTCCGTCTGGGTCACTGCTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAGGGTCCCAATATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAGGGTCCCAATATGAA 480
QY 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACAGGGAGACAGTCCGATC 540
DB 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACAGGGAGACAGTCCGATC 540
QY 541 GTCCTGAGAGCATGTGTGTGCGGGGAACACCGGAGGGACTCAATGTCAAGCGACGC 600
DB 541 GTCCTGAGAGCATGTGTGTGCGGGGAACACCGGAGGGACTCAATGTCAAGCGACGC 600
QY 601 GCGCGACCTTGTGTGTGCAAGGTGATGCACTGCTGCAAGCGGCGTGTGTGACTGG 660
DB 601 GCGCGACCTTGTGTGTGCAAGGTGATGCACTGCTGCAAGCGGCGTGTGTGACTGG 660
QY 661 GCGGAGGGTGTGCGGACCGGACCGGCTGGCATCTACACCGGTGTCACTTACTTGG 720
DB 661 GCGGAGGGTGTGCGGACCGGACCGGCTGGCATCTACACCGGTGTCACTTACTTGG 720
QY 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGTGT 771
DB 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGTGT 771

```

RESULT 2  
US-09-598-982C-40

```

; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-40

```

```

Query Match      99.8%; Score 769.4; DB 1; Length 771;
Best Local Similarity 99.9%; Pred. No. 0.037;
Matches 770; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTTG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTTG 60
QY 61 CAGGTGAGCTTGAAGTCCAGCGCCCAATCTGATGCACTTCTCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAAGTCCAGCGCCCAATCTGATGCACTTCTCGGGGGCTCCCTCATC 120
QY 121 CACCCCAATGGGTGTGACCGGACGGCACTGCGTGGGACCGGAGCTCAAGATCTGGCC 180
DB 121 CACCCCAATGGGTGTGACCGGACGGCACTGCGTGGGACCGGAGCTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTCGGCTC 240
DB 181 GGCCTCAGGGGTCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGTCGGCTC 240
QY 241 AGCAGATCATGTGACCCCAAGTTTACACCGCCAGATGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGACCCCAAGTTTACACCGCCAGATGAGCGGACATCGCCCTG 300
QY 301 CTGAGCTGAGAGAGCGGGTGAAGGTCTCAAGCAAGTCAAGCTGACCTTGGCCCT 360
DB 301 CTGAGCTGAGAGAGCGGGTGAAGGTCTCAAGCAAGTCAAGCTGACCTTGGCCCT 360
QY 361 GGCCTCAGAGACCTTCCCCCGGGAGTCCGTCTGGGTCACTGCTGGGGCGATGTGAC 420
DB 361 GGCCTCAGAGACCTTCCCCCGGGAGTCCGTCTGGGTCACTGCTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAGGGTCCCAATATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAGGGTCCCAATATGAA 480
QY 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACAGGGAGACAGTCCGATC 540
DB 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACAGGGAGACAGTCCGATC 540
QY 541 GTCCTGAGAGCATGTGTGTGCGGGGAACACCGGAGGGACTCAATGTCAAGCGACGC 600
DB 541 GTCCTGAGAGCATGTGTGTGCGGGGAACACCGGAGGGACTCAATGTCAAGCGACGC 600
QY 601 GCGCGACCTTGTGTGTGCAAGGTGATGCACTGCTGCAAGCGGCGTGTGTGACTGG 660
DB 601 GCGCGACCTTGTGTGTGCAAGGTGATGCACTGCTGCAAGCGGCGTGTGTGACTGG 660
QY 661 GCGGAGGGTGTGCGGACCGGACCGGCTGGCATCTACACCGGTGTCACTTACTTGG 720
DB 661 GCGGAGGGTGTGCGGACCGGACCGGCTGGCATCTACACCGGTGTCACTTACTTGG 720

```

```
Db      661 GCGGAGGGCTGTGTGCCAGCCCAACCGGCTGTGCATCTACACCCGTGTCACTACTTCTTG 720
Qy      721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCGTGT 771
Db      721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCGTGT 771

RESULT 3
US-09-598-982C-26
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

Query Match      99.4%; Score 766.2; DB 1; Length 771;
Best Local Similarity 99.6%; Pred. No. 0.038; 3; Indels 0; Gaps 0;
Matches 768; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      1 GGGCCCCCTCGAAGAAAAGATCTGTGGGGGTCAAGAGGCCCGCCAGAGCAAGTGGCCCTTG 60
Db      1 GGGCCCCCTCGAAGAAAAGATCTGTGGGGGTCAAGAGGCCCGCCAGAGCAAGTGGCCCTTG 60

Qy      61 CAGGTAGGCTTGAGAGTCCACGGCCCATCTAGATGCACTTCTGCGGGGGCTCCCTCATC 120
Db      61 CAGGTAGGCTTGAGAGTCCACGGCCCATCTAGATGCACTTCTGCGGGGGCTCCCTCATC 120

Qy      121 CACCCCAAGTGGGTGTGACCGAGCGACCTGCGTGGGACCGGACGTCAAGATCTTGACC 180
Db      121 CACCCCAAGTGGGTGTGACCGAGCGACCTGCGTGGGACCGGACGTCAAGATCTTGACC 180

Qy      181 GCGCTCAGGGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGTGTGCGGTG 240
Db      181 GCGCTCAGGGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGTGTGCGGTG 240

Qy      241 AGCAGATCATCTGTGCAACCGGCTTCTACACCGCCCAAGTCCGAGGAGGACATCGCCCTG 300
Db      241 AGCAGATCATCTGTGCAACCGGCTTCTACACCGCCCAAGTCCGAGGAGGACATCGCCCTG 300

Qy      301 CTGAGGCTGAGAGAGCGGATGAAAGTCTTCAGCCACGTCCACAGCTGACCTGCCCCCT 360
Db      301 CTGAGGCTGAGAGAGCGGATGAAAGTCTTCAGCCACGTCCACAGCTGACCTGCCCCCT 360

Qy      361 GCGCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGGCTGGGGCGATGTGGAC 420
Db      361 GCGCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGGCTGGGGCGATGTGGAC 420

Qy      421 AATGATAGAGGCGCTCCACAGCGCATTTCTCTGAAGAGGTAAGGTCCTCCATTAATGAA 480
Db      421 AATGATAGAGGCGCTCCACAGCGCATTTCTCTGAAGAGGTAAGGTCCTCCATTAATGAA 480

Qy      481 AACCAATTTGTGAGCGGAAAATACCACTTGGCGCTTACACAGGAGAGCAAGTCCGCATC 540
Db      481 AACCAATTTGTGAGCGGAAAATACCACTTGGCGCTTACACAGGAGAGCAAGTCCGCATC 540

Qy      541 GTCCGTAGCAGATGTGTGTGTGCGGGAAACACCGGAGGAGCTATGTCAAGGCGACGCC 600
```

```
Db      541 GTCCGTAGCAGATGTGTGTGTGCGGGAAACACCGGAGGAGCTATGTCCAGAGAGACGCC 600
Qy      601 GCGGACCTTGTGTGTGAGAGTGAATGACACTTGTGCTGAGGCGCGGTGTGACTGG 660
Db      601 GCGGACCTTGTGTGTGAGAGTGAATGACACTTGTGCTGAGGCGCGGTGTGACTGG 660

Qy      661 GCGGAGGGCTGTGTGCCAGCCCAACCGGCTGTGCATCTACACCCGTGTCACTACTTCTTG 720
Db      661 GCGGAGGGCTGTGTGCCAGCCCAACCGGCTGTGCATCTACACCCGTGTCACTACTTCTTG 720

Qy      721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCGTGT 771
Db      721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGCGTGT 771

RESULT 4
US-09-598-982C-42
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42

Query Match      99.2%; Score 764.6; DB 1; Length 771;
Best Local Similarity 99.5%; Pred. No. 0.039; 4; Indels 0; Gaps 0;
Matches 767; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy      1 GGGCCCCCTCGAAGAAAAGATCTGTGGGGGTCAAGAGGCCCGCCAGAGCAAGTGGCCCTTG 60
Db      1 GGGCCCCCTCGAAGAAAAGATCTGTGGGGGTCAAGAGGCCCGCCAGAGCAAGTGGCCCTTG 60

Qy      61 CAGGTAGGCTTGAGAGTCCACGGCCCATCTAGATGCACTTCTGCGGGGGCTCCCTCATC 120
Db      61 CAGGTAGGCTTGAGAGTCCACGGCCCATCTAGATGCACTTCTGCGGGGGCTCCCTCATC 120

Qy      121 CACCCCAAGTGGGTGTGACCGAGCGACCTGCGTGGGACCGGACGTCAAGATCTTGACC 180
Db      121 CACCCCAAGTGGGTGTGACCGAGCGACCTGCGTGGGACCGGACGTCAAGATCTTGACC 180

Qy      181 GCGCTCAGGGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGTGTGCGGTG 240
Db      181 GCGCTCAGGGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGTGTGCGGTG 240

Qy      241 AGCAGATCATCTGTGCAACCGGCTTCTACACCGCCCAAGTCCGAGGAGGACATCGCCCTG 300
Db      241 AGCAGATCATCTGTGCAACCGGCTTCTACACCGCCCAAGTCCGAGGAGGACATCGCCCTG 300

Qy      301 CTGAGGCTGAGAGAGCGGATGAAAGTCTTCAGCCACGTCCACAGCTGACCTGCCCCCT 360
Db      301 CTGAGGCTGAGAGAGCGGATGAAAGTCTTCAGCCACGTCCACAGCTGACCTGCCCCCT 360

Qy      361 GCGCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGGCTGGGGCGATGTGGAC 420
Db      361 GCGCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGGCTGGGGCGATGTGGAC 420
```

```

QY 421 AATGATGAGCGCTCCCAACCCGCAATTTCTCTGAAAGAGTGAAGTCCCATTAATGAA 480
DB 421 AATGATGAGCGCTCCCAACCCGCAATTTCTCTGAAAGAGTGAAGTCCCATTAATGAA 480
QY 481 AACCACTTTGTGAGCAAAATACCACTTTGGCGCTTACACGGGAGAGACAGCTCCGATC 540
DB 481 AACCACTTTGTGAGCAAAATACCACTTTGGCGCTTACACGGGAGAGACAGCTCCGATC 540
QY 541 GTCCGTGACGACATGCTGTGTGTGCTCCGGGAAACACCCGAGGAGTCAATGTCAAGCGACGCC 600
DB 541 GTCCGTGACGACATGCTGTGTGTGCTCCGGGAAACACCCGAGGAGTCAATGTCAAGCGACGCC 600
QY 601 GCGGACCTCTGTGTGTGCAAGTGAATGGCACTTGTGCTGCAAGCGGAGCTGTGCTGAGCTGG 660
DB 601 GCGGACCTCTGTGTGTGCAAGTGAATGGCACTTGTGCTGCAAGCGGAGCTGTGCTGAGCTGG 660
QY 661 GCGGAGGCGCTGTGTGCTCCGAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTACTTG 720
DB 661 GCGGAGGCGCTGTGTGCTCCGAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTACTTG 720
QY 721 GACTGGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
DB 721 GACTGGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771

```

```

RESULT 5
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-8

```

```

Query Match          98.8%; Score 761.4; DB 1; Length 771;
Best Local Similarity 99.2%; Pred. No. 0.04;
Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 GGGCCCCCTGAGAAAAGAAATCGTCGGGGGTCAAGAGAGCCGCCAGAGAGCAATGAGCCCTGG 60
DB 1 GGGCCCCCTGAGAAAAGAAATCGTCGGGGGTCAAGAGAGCCGCCAGAGAGCAATGAGCCCTGG 60
QY 61 CAGGTGAGCTGAGATGCAAGGCGCATATCTGATGATCACTTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGATGCAAGGCGCATATCTGATGATCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCACTGAGGTGCTGACCGGAGCGCATCTTACTACAGAGCAAGTGTGCTGCGGTC 240
DB 121 CACCCCACTGAGGTGCTGACCGGAGCGCATCTTACTACAGAGCAAGTGTGCTGCGGTC 240
QY 181 GCGCTTGAAGGTGCAATGCGGGAGAGCACTTACTACAGAGCAAGTGTGCTGCGGTC 240
DB 181 GCGCTTGAAGGTGCAATGCGGGAGAGCACTTACTACAGAGCAAGTGTGCTGCGGTC 240
QY 241 AGCAGATCATCTGACCAACAGATTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATCTGACCAACAGATTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300

```

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QY 301 CTGAGCTGAGAGAGCGGCTGAAGGTCTTCAGCCACCTGTCACAGGTCACCTCTGCCCCCT 360
DB 301 CTGAGCTGAGAGAGCGGCTGAAGGTCTTCAGCCACCTGTCACAGGTCACCTCTGCCCCCT 360
QY 361 GCGTCAGAGACCTTCCCCCGGGAGATGCGGTCTGAGGTCACTGAGTGGAGATGAGAC 420
DB 361 GCGTCAGAGACCTTCCCCCGGGAGATGCGGTCTGAGGTCACTGAGTGGAGATGAGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCAATTTCTCTGAAAGAGTGAAGTCCCATTAATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGCAATTTCTCTGAAAGAGTGAAGTCCCATTAATGAA 480
QY 481 AACCACTTTGTGAGCAAAATACCACTTTGGCGCTTACACGGGAGAGAGAGTCCGATC 540
DB 481 AACCACTTTGTGAGCAAAATACCACTTTGGCGCTTACACGGGAGAGAGAGTCCGATC 540
QY 541 GTCCGTGACGACATGCTGTGTGTGCTCCGGGAAACACCCGAGGAGTCAATGTCAAGCGACGCC 600
DB 541 GTCCGTGACGACATGCTGTGTGTGCTCCGGGAAACACCCGAGGAGTCAATGTCAAGCGACGCC 600
QY 601 GCGGACCTCTGTGTGTGCAAGTGAATGGCACTTGTGCTGCAAGCGGAGCTGTGCTGAGCTGG 660
DB 601 GCGGACCTCTGTGTGTGCAAGTGAATGGCACTTGTGCTGCAAGCGGAGCTGTGCTGAGCTGG 660
QY 661 GCGGAGGCGCTGTGTGCTCCGAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTACTTG 720
DB 661 GCGGAGGCGCTGTGTGCTCCGAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTACTTG 720
QY 721 GACTGGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
DB 721 GACTGGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771

```

```

RESULT 6
US-09-598-982C-22
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

```

```

Query Match          98.3%; Score 758.2; DB 1; Length 771;
Best Local Similarity 99.0%; Pred. No. 0.041;
Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGGCCCCCTGAGAAAAGAAATCGTCGGGGGTCAAGAGAGCCGCCAGAGAGCAATGAGCCCTGG 60
DB 1 GGGCCCCCTGAGAAAAGAAATCGTCGGGGGTCAAGAGAGCCGCCAGAGAGCAATGAGCCCTGG 60
QY 61 CAGGTGAGCTGAGATGCAAGGCGCATATCTGATGATGCACTTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGATGCAAGGCGCATATCTGATGATGCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCACTGAGGTGCTGACCGGAGCGCATCTTACTACAGAGCAAGTGTGCTGCGGTC 240
DB 121 CACCCCACTGAGGTGCTGACCGGAGCGCATCTTACTACAGAGCAAGTGTGCTGCGGTC 240

```



```
Db 121 CACCCCAAGTGGGTGTGAACCGACGCACTGCGTGGAGACCGGACGCTCAAGATCTGAGCC 180
Qy 181 GCCCTCAGGGGTGAACTGGGGAGAGACACCTTACTACCAAGGACCGAGCTGTGCCGATC 240
Db 181 GCCCTCAGGGGTGAACTGGGGAGAGACACCTTACTACCAAGGACCGAGCTGTGCCGATC 240
Qy 241 AGCAGATCATCTGTGACACCCAGTTCTACACCGCCCAAGTGGAGCGGACATGCGCTTG 300
Db 241 AGCAGATCATCTGTGACACCCAGTTCTACACCGCCCAAGTGGAGCGGACATGCGCTTG 300
Qy 301 CTGAGCTGGAGAGACCGGTGAAGGTCTCAGGCAAGTCCACAGCGTCAACCGTCAACCGTCCCT 360
Db 301 CTGAGCTGGAGAGACCGGTGAAGGTCTCAGGCAAGTCCACAGCGTCAACCGTCAACCGTCCCT 360
Qy 361 GCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGTCACTGCTGGGGCGATGTGAGAC 420
Db 361 GCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGTCACTGCTGGGGCGATGTGAGAC 420
Qy 421 AATGATGAGCGCTCCACCGCAATTTCTTGAAGCAGGTGAAGGTCCCATATGAA 480
Db 421 AATGATGAGCGCTCCACCGCAATTTCTTGAAGCAGGTGAAGGTCCCATATGAA 480
Qy 481 AACCAATTTGTACGCAAAATACACCTTGGCGCTTACACGGGAGACGACGTCGCGATC 540
Db 481 AACCAATTTGTACGCAAAATACACCTTGGCGCTTACACGGGAGACGACGTCGCGATC 540
Qy 541 GTCCTGACGACATGCTGTGTGCGGGAAACCCGAGGGACTCATGTCAAGGCGACGCGC 600
Db 541 GTCCTGACGACATGCTGTGTGCGGGAAACCCGAGGGACTCATGTCAAGGCGACGCTCC 600
Qy 601 GCGGACCTCTGTGTGACAGGTGAATGCACTTGCTGCAAGCGCGGCTGTCACTGG 660
Db 601 GCGGACCTCTGTGTGACAGGTGAATGCACTTGCTGCAAGCGCGGCTGTCACTGG 660
Qy 661 GGGAGGGCTGTGCGGACCGGACCGGCTGCGATCTACACCGGTGACCTTACTTG 720
Db 661 GGGAGGGCTGTGCGGACCGGACCGGCTGCGATCTACACCGGTGACCTTACTTG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGTGT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGTGT 771

RESULT 7
US-09-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafelict, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

Query Match 98.1%; Score 756.6; DB 1; Length 771;
Best Local Similarity 98.8%; Pred. No. 0.042;
Matches 762; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
```

```
Db 1 GGGCCCTCGAAGAAAAGATCTGTGGGGGTCAAGAGGCCCCCAGAGCAAGTGCGCTGG 60
Qy 61 CAGGTGAGCTGTGAGTCCACGCGGCATATCTGATGCACTTCTGGGGGGGCTCCCTCATC 120
Db 61 CAGGTGAGCTGTGAGTCCACGCGGCATATCTGATGCACTTCTGGGGGGGCTCCCTCATC 120
Qy 121 CACCCCAAGTGGGTGTGAACCGACGCACTGCGTGGAGACCGGACGCTCAAGATCTGAGCC 180
Db 121 CACCCCAAGTGGGTGTGAACCGACGCACTGCGTGGAGACCGGACGCTCAAGATCTGAGCC 180
Qy 181 GCCCTCAGGGGTGAACTGGGGAGAGACCTTACTACCAAGGACCGAGCTGTGCCGATC 240
Db 181 GCCCTCAGGGGTGAACTGGGGAGAGACCTTACTACCAAGGACCGAGCTGTGCCGATC 240
Qy 241 AGCAGATCATCTGTGACACCCAGTTCTACACCGCCCAAGTGGAGCGGACATGCGCTTG 300
Db 241 AGCAGATCATCTGTGACACCCAGTTCTACACCGCCCAAGTGGAGCGGACATGCGCTTG 300
Qy 301 CTGAGCTGGAGAGACCGGTGAAGGTCTCAGGCAAGTCCACAGCGTCAACCGTCAACCGTCCCT 360
Db 301 CTGAGCTGGAGAGACCGGTGAAGGTCTCAGGCAAGTCCACAGCGTCAACCGTCAACCGTCCCT 360
Qy 361 GCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGTCACTGCTGGGGCGATGTGAGAC 420
Db 361 GCCTCAGAGACCTTCCCCCGGGAGATGCCGTGTGGTCACTGCTGGGGCGATGTGAGAC 420
Qy 421 AATGATGAGCGCTCCACCGCAATTTCTTGAAGCAGGTGAAGGTCCCATATGAA 480
Db 421 AATGATGAGCGCTCCACCGCAATTTCTTGAAGCAGGTGAAGGTCCCATATGAA 480
Qy 481 AACCAATTTGTACGCAAAATACACCTTGGCGCTTACACGGGAGACGACGTCGCGATC 540
Db 481 AACCAATTTGTACGCAAAATACACCTTGGCGCTTACACGGGAGACGACGTCGCGATC 540
Qy 541 GTCCTGACGACATGCTGTGTGCGGGAAACCCGAGGGACTCATGTCAAGGCGACGCGC 600
Db 541 GTCCTGACGACATGCTGTGTGCGGGAAACCCGAGGGACTCATGTCAAGGCGACGCTCC 600
Qy 601 GCGGACCTCTGTGTGACAGGTGAATGCACTTGCTGCAAGCGCGGCTGTCACTGG 660
Db 601 GCGGACCTCTGTGTGACAGGTGAATGCACTTGCTGCAAGCGCGGCTGTCACTGG 660
Qy 661 GGGAGGGCTGTGCGGACCGGACCGGCTGCGATCTACACCGGTGACCTTACTTG 720
Db 661 GGGAGGGCTGTGCGGACCGGACCGGCTGCGATCTACACCGGTGACCTTACTTG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGTGT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGTGT 771

RESULT 8
US-09-598-982C-20
; Sequence 20, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafelict, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
```

NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-20

Query Match  
Best Local Similarity 98.7%; Score 755; DB 1; Length 771;  
Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

```

QY 1 GGGCCCCCTGAGAAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTG 60
   |||
Db 1 GGGCCCCCTGAGAAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTG 60
QY 61 CAGGTGAGGCTGAGAGTCCAGCGGCCCATCTGAGATGCACTTCTGCGGGGGCTCCCTCATC 120
   |||
Db 61 CAGGTGAGGCTGAGAGTCCAGCGGCCCATCTGAGATGCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCACTGAGGTGCTGACCGAGCGCACTGCGTGGGACCGGACGTCAAGATCTGGCC 180
   |||
Db 121 CACCCCACTGAGGTGCTGACCGCGCGCGGTGCTGGGACCGGACGTCAAGATCTGGCC 180
QY 181 GCCCTCAAGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240
   |||
Db 181 GCCCTCAAGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240
QY 241 AGCAGGATCATGTGACCCACAGTTCTACCGGCCCATGCGAGCGGACATCGCCCTG 300
   |||
Db 241 AGCAGGATCATGTGACCCACAGTTCTACCGGCCCATGCGAGCGGACATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGGCGGTGAAAGTCTCAGCCACAGTCCACAGCTGACCCCTGCCCT 360
   |||
Db 301 CTGAGAGCTGAGAGGCGGTGAAAGTCTCAGCCACAGTCCACAGCTGACCCCTGCCCT 360
QY 361 GCGCTCAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGCGATGTGAC 420
   |||
Db 361 GCGCTCAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480
   |||
Db 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480
QY 481 AACCAATTGTCAGCAAAATACCACTTGGCGCTTACACGGGAGACAGACGTCCGCATC 540
   |||
Db 481 AACCAATTGTCAGCAAAATACCACTTGGCGCTTACACGGGAGACAGACGTCCGCATC 540
QY 541 GTCCGTGAGCACTGTGTGTGCGGGAAACCCCGAGGGACTCATGTCCAGGGCGACTCC 600
   |||
Db 541 GTCCGTGAGCACTGTGTGTGCGGGAAACCCCGAGGGACTCATGTCCAGGGCGACTCC 600
QY 601 GCGGGAAGCTGTGTGCAAGGTGAATGGACCTGGCTGACAGCGGGCGGTGTCAGCTGG 660
   |||
Db 601 GCGGGAAGCTGTGTGCAAGGTGAATGGACCTGGCTGACAGCGGGCGGTGTCAGCTGG 660
QY 661 GCGGAGGCTGTGTGCGGAGCCCAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
   |||
Db 661 GCGGAGGCTGTGTGCGGAGCCCAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
QY 721 GACTGATCACCACACTATGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
   |||
Db 721 GACTGATCACCACACTATGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771

```

RESULT 9  
US-09-598-982C-36  
Sequence 36, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendach, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 36  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-36

Query Match  
Best Local Similarity 97.7%; Score 753.4; DB 1; Length 771;  
Matches 760; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

```

QY 1 GGGCCCCCTGAGAAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTG 60
   |||
Db 1 GGGCCCCCTGAGAAAAAGATCGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTG 60
QY 61 CAGGTGAGGCTGAGAGTCCAGCGGCCCATCTGAGATGCACTTCTGCGGGGGCTCCCTCATC 120
   |||
Db 61 CAGGTGAGGCTGAGAGTCCAGCGGCCCATCTGAGATGCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCACTGAGGTGCTGACCGAGCGCACTGCGTGGGACCGGACGTCAAGATCTGGCC 180
   |||
Db 121 CACCCCACTGAGGTGCTGACCGCGCGCGGTGCTGGGACCGGACGTCAAGATCTGGCC 180
QY 181 GCCCTCAAGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240
   |||
Db 181 GCCCTCAAGGTGCACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCCGCTC 240
QY 241 AGCAGGATCATGTGACCCACAGTTCTACCGGCCCATGCGAGCGGACATCGCCCTG 300
   |||
Db 241 AGCAGGATCATGTGACCCACAGTTCTACCGGCCCATGCGAGCGGACATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGGCGGTGAAAGTCTCAGCCACAGTCCACAGCTGACCCCTGCCCT 360
   |||
Db 301 CTGAGAGCTGAGAGGCGGTGAAAGTCTCAGCCACAGTCCACAGCTGACCCCTGCCCT 360
QY 361 GCGCTCAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGCGATGTGAC 420
   |||
Db 361 GCGCTCAGAGACTTCCCCCGGGAGTCCGTGCTGGGTCACTGGCTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480
   |||
Db 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480
QY 481 AACCAATTGTCAGCAAAATACCACTTGGCGCTTACACGGGAGACAGACGTCCGCATC 540
   |||
Db 481 AACCAATTGTCAGCAAAATACCACTTGGCGCTTACACGGGAGACAGACGTCCGCATC 540
QY 541 GTCCGTGAGCACTGTGTGTGCGGGAAACCCCGAGGGACTCATGTCCAGGGCGACTCC 600
   |||
Db 541 GTCCGTGAGCACTGTGTGTGCGGGAAACCCCGAGGGACTCATGTCCAGGGCGACTCC 600
QY 601 GCGGGAAGCTGTGTGCAAGGTGAATGGACCTGGCTGACAGCGGGCGGTGTCAGCTGG 660
   |||
Db 601 GCGGGAAGCTGTGTGCAAGGTGAATGGACCTGGCTGACAGCGGGCGGTGTCAGCTGG 660
QY 661 GCGGAGGCTGTGTGCGGAGCCCAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
   |||
Db 661 GCGGAGGCTGTGTGCGGAGCCCAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
QY 721 GACTGATCACCACACTATGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
   |||
Db 721 GACTGATCACCACACTATGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771

```

RESULT 10  
US-09-598-982C-10  
Sequence 10, Application US/09598982C

```
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Mafilt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ TITLE OF INVENTION: AND METHODS OF MAKING SAME
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ PRIOR FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 10
/ LENGTH: 735
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (1)..(735)
US-09-598-982C-10
```

Query Match 94.1%; Score 725.4; DB 1; Length 735;

Best Local Similarity 99.2%; Pred. No. 0.059; Mismatches 6; Indels 0; Gaps 0;

Matches 729; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

```
Qy 19 ATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGAGAGTGAAGCTGAGAGTC 78
Db 1 ATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGAGAGTGAAGCTGAGAGTC 60
Qy 79 CAGGCCCCATCTGATGCACTTCTGGGGGGCTCCCTATCCACCCCAAGTGGTCTG 138
Db 61 CAGGCCCCATCTGATGCACTTCTGGGGGGCTCCCTATCCACCCCAAGTGGTCTG 120
Qy 139 ACCGCAAGCAGCTGCGTGGGAGCGGAGCTCAAGAGATCTGGCGCCCTCAGGGTGAAC 198
Db 121 ACCGCAAGCAGCTGCGTGGGAGCGGAGCTCAAGAGATCTGGCGCCCTCAGGGTGAAC 180
Qy 199 CCGGAGAGCAGCTCTACTACTACAGAGCAAGCTGCTGCGGTGAGAGATCATGTCAC 258
Db 181 CCGGAGAGCAGCTCTACTACTACAGAGCAAGCTGCTGCGGTGAGAGATCATGTCAC 240
Qy 259 CCACAGTTCTACACCCGCCAGATCGAGCGGACATGCGCTGCTGAGACTGAGAGCCG 318
Db 241 CCACAGTTCTACACCCGCCAGATCGAGCGGACATGCGCTGCTGAGACTGAGAGCCG 300
Qy 319 GTAAAGGTCTCCAGCCAGCTCAACAGCTGACCCCTGCTCAGAGACCTTCCCG 378
Db 301 GTAAAGGTCTCCAGCCAGCTCAACAGCTGACCCCTGCTCAGAGACCTTCCCG 360
Qy 379 CCGGGAGATGCGGTGCTGGGTCACTGGCTGGGGCGATGTGACAATGATGAGCCCTCCA 438
Db 361 CCGGGAGATGCGGTGCTGGGTCACTGGCTGGGGCGATGTGACAATGATGAGCCCTCCA 420
Qy 439 CCGGCAATTTCTCTGAAGCAGGTGAAGTCCCATATGAAAAACCATTTTGTAGCGCA 498
Db 421 CCGGCAATTTCTCTGAAGCAGGTGAAGTCCCATATGAAAAACCATTTTGTAGCGCA 480
Qy 499 AAATACACCTTGGCGCTCAACGAGAGAGAGTCCGATCGATCGTGGTGAAGCATGCTG 558
Db 481 AAATACACCTTGGCGCTCAACGAGAGAGAGTCCGATCGATCGTGGTGAAGCATGCTG 540
Qy 559 TGTGCGGGAGAACCCGAGAGGACTCATGTCAAAGCGACGCGCGAGACTTGTGTGTC 618
Db 541 TGTGCGGGAGAACCCGAGAGGACTCATGTCAAAGCGACGCGCGAGACTTGTGTGTC 600
Qy 619 AAGGTGAATGGACCTGGCTGCAAGCGGGGCTGTGATGCTGGGGCCAGGGCTGTGCCAG 678
Db 601 AAGGTGAATGGACCTGGCTGCAAGCGGGGCTGTGATGCTGGGGCCAGGGCTGTGCCAG 660
Qy 679 CCNAACGGGCTGGCATCTACACCCGCTGACCTACTACTTGGATGATGATGCACTAT 728
Db 661 CCNAACGGGCTGGCATCTACACCCGCTGACCTACTACTTGGATGATGATGCACTAT 720
```

```
Qy 739 GTCCCCAAAAGCCG 753
Db 721 GTCCCCAAAAGCCG 735
```

RESULT 11

US-09-598-982C-8/c

Sequence 8, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Mafilt, Mark

APPLICANT: Haak-Frendscho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

TITLE OF INVENTION: AND METHODS OF MAKING SAME

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

PRIOR FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 8

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-8

Query Match 3.7%; Score 28.2; DB 1; Length 771;

Best Local Similarity 53.1%; Pred. No. 17; Mismatches 53; Indels 0; Gaps 0;

Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```
Qy 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTG 60
Db 113 GAGCCCCCGAGAAAGTCACTCAATGAGGCGCTGAGACTCTGAGGCTCACTGCCAGGCG 54
Qy 61 CAGTGAAGCTGAGATGCAAGCGCCCATATGATGCACTTCTGGGGGGCTC 113
Db 53 CACTTGTCTCTGGGGGCTCCCTGAGACCCCGAGAGATCTTTCTGAGGGGGCC 1
```

RESULT 12

US-09-598-982C-20/c

Sequence 20, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Mafilt, Mark

APPLICANT: Haak-Frendscho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

TITLE OF INVENTION: AND METHODS OF MAKING SAME

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

PRIOR FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 20

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-20

Query Match 3.7%; Score 28.2; DB 1; Length 771;

Best Local Similarity 53.1%; Pred. No. 17; Mismatches 53; Indels 0; Gaps 0;

Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCCAGAGCAAGTGCCCTTG 60  
Db 113 GAGCCCCCGAGAAAGTGCATTCAGTATGGCCGTGAGCTCTACCTGGCCAGGGC 54  
Oy 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATATGATGCACTTCTGCGGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCC 1

RESULT 13  
US-09-598-982C-22/c

; Sequence 22, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 22  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-22

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCCAGAGCAAGTGCCCTTG 60  
Db 113 GAGCCCCCGAGAAAGTGCATTCAGTATGGCCGTGAGCTCTACCTGGCCAGGGC 54  
Oy 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATATGATGCACTTCTGCGGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCC 1

## RESULT 14

US-09-598-982C-24/c  
; Sequence 24, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 24  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-24

Query Match 3.7%; Score 28.2; DB 1; Length 771;

Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCCAGAGCAAGTGCCCTTG 60  
Db 113 GAGCCCCCGAGAAAGTGCATTCAGTATGGCCGTGAGCTCTACCTGGCCAGGGC 54  
Oy 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATATGATGCACTTCTGCGGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCC 1

## RESULT 15

US-09-598-982C-26/c  
; Sequence 26, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 26  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-26

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Oy 1 GGGCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCCAGAGCAAGTGCCCTTG 60  
Db 113 GAGCCCCCGAGAAAGTGCATTCAGTATGGCCGTGAGCTCTACCTGGCCAGGGC 54  
Oy 61 CAGGTGAGCTTGAGAGTCCACGCGCCCATATGATGCACTTCTGCGGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCC 1

## RESULT 16

US-09-598-982C-36/c  
; Sequence 36, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 36  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)

US-09-598-982C-36

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAAAGTGCATCCAGTATGGGCCGTGACTCTCAGGCTCAGCTGCCAGGGC 54  
Qy 61 CAGGTAGCCTGAGATCCACGGCCCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCGAGGGGCC 1

RESULT 17

US-09-598-982C-38/C  
; Sequence 38, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 38  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-38

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAAAGTGCATCCAGTATGGGCCGTGACTCTCAGGCTCAGCTGCCAGGGC 54  
Qy 61 CAGGTAGCCTGAGATCCACGGCCCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCGAGGGGCC 1

RESULT 18  
US-09-598-982C-40/C  
; Sequence 40, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 40  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens

FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-40

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAAAGTGCATCCAGTATGGGCCGTGACTCTCAGGCTCAGCTGCCAGGGC 54  
Qy 61 CAGGTAGCCTGAGATCCACGGCCCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCGAGGGGCC 1

RESULT 19

US-09-598-982C-42/C  
; Sequence 42, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 42  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-42

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAAAGTGCATCCAGTATGGGCCGTGACTCTCAGGCTCAGCTGCCAGGGC 54  
Qy 61 CAGGTAGCCTGAGATCCACGGCCCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCGAGGGGCC 1

RESULT 20  
US-09-598-982C-10/C  
; Sequence 10, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 10

US-09-598-982C-10/C  
; Sequence 10, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 10  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens

LENGTH: 735  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (1)..(735)  
 US-09-598-982C-10

Query Match 3.5%; Score 27.2; DB 1; Length 735;  
 Best Local Similarity 52.9%; Pred. No. 18;  
 Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

QY GCGGACATCGCCCTGAGCTGAGCGCGGTGAAGTCTCCAGCCAGCCAGCG 345  
 DB GGGGACCTTCACTCTCTTCAAGAAATGCGGTGGAGCGCTCATCTTCCACA-- 396  
 QY GTACACCTGCGCCCTGCTCAGAGACCTTCCCCCGGGGANTCCGTCTGGTCACTGCG 405  
 DB -TCGCCCCAGCAGTACCCAGACGCGCATCCCCGGGGGAAGTCTCTGAGGCAAGGGG 337  
 QY 406 TGGGCGCA---TGTGACATATGATGAGCCCTCCACCCCATTTCTTGAAGCAGTG 462  
 DB 336 CAGGGTGAACCGTGTGACGTGTGAGACCTTCAACCGGCTCTCCAGCTCCAGCAGGCG 277  
 QY 463 AAGTCCCC 471  
 DB 276 GATGTCCG 268

Search completed: August 26, 2005, 12:32:31  
 Job time : 4.81314 secs

GenCore version 5.1.6  
 Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 26, 2005, 12:31:55 ; Search time 2.81314 Seconds  
 (without alignment)  
 4.206 Million cell updates/sec

Title: US-09-598-982C-26  
 Perfect score: 771  
 Sequence: 1 gggccctcgagaaagaaat.....cgtgaagcgccgcctcgt 771

Scoring table: IDENTITY\_NUC  
 Gapop 10.0 , Gapext 0.5

Searched: 10 seqs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
 Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 200 summaries

Database : US09598982C\_rev.seq:\*  
 Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

Result \*  
 No. Score Query Match Length DB ID Description  
 1 771 100.0 771 1 US-09-598-982C-26 Sequence 26, Appl  
 2 769.4 99.8 771 1 US-09-598-982C-42 Sequence 42, Appl

3 766.2 99.4 771 1 US-09-598-982C-24 Sequence 24, Appl  
 4 764.6 99.2 771 1 US-09-598-982C-40 Sequence 40, Appl  
 5 761.4 98.8 771 1 US-09-598-982C-8 Sequence 8, Appl  
 6 758.2 98.3 771 1 US-09-598-982C-22 Sequence 22, Appl  
 7 756.6 98.1 771 1 US-09-598-982C-38 Sequence 38, Appl  
 8 755 97.9 771 1 US-09-598-982C-20 Sequence 20, Appl  
 9 753.4 97.7 771 1 US-09-598-982C-36 Sequence 36, Appl  
 10 725.4 94.1 735 1 US-09-598-982C-10 Sequence 10, Appl  
 11 728.2 3.7 771 1 US-09-598-982C-8 Sequence 8, Appl  
 12 728.2 3.7 771 1 US-09-598-982C-20 Sequence 20, Appl  
 13 28.2 3.7 771 1 US-09-598-982C-22 Sequence 22, Appl  
 14 28.2 3.7 771 1 US-09-598-982C-26 Sequence 26, Appl  
 15 28.2 3.7 771 1 US-09-598-982C-35 Sequence 35, Appl  
 16 28.2 3.7 771 1 US-09-598-982C-38 Sequence 38, Appl  
 17 28.2 3.7 771 1 US-09-598-982C-42 Sequence 42, Appl  
 18 28.2 3.7 771 1 US-09-598-982C-40 Sequence 40, Appl  
 19 28.2 3.7 771 1 US-09-598-982C-42 Sequence 42, Appl  
 20 27.2 3.5 735 1 US-09-598-982C-10 Sequence 10, Appl

## ALIGNMENTS

RESULT 1  
 US-09-598-982C-26  
 ; Sequence 26, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598, 982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079, 970  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 26  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-26

Query Match 100.0%; Score 771; DB 1; Length 771;  
 Best Local Similarity 100.0%; Pred. No. 0.036;  
 Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGAAATGTCGGGGGTGAGAGGCCCCCAGAGCAATGCGCTGG 60  
 DB 1 GGGCCCTCGAGAAAGAAATGTCGGGGGTGAGAGGCCCCCAGAGCAATGCGCTGG 60  
 QY 61 CAGGTAGCCTGAGAGTCCAGCGCCCATATCTGATGCACTTCTGGGGGGCTCCCTATC 120  
 DB 61 CAGGTAGCCTGAGAGTCCAGCGCCCATATCTGATGCACTTCTGGGGGGCTCCCTATC 120  
 QY 121 CACCCCGATGGGTGTCGACCGCGCATCGGTGGGACCGGACGTCGAAGATCTGGCC 180  
 DB 121 CACCCCGATGGGTGTCGACCGCGCATCGGTGGGACCGGACGTCGAAGATCTGGCC 180  
 QY 181 GCCCTCAGGGTGCACCTGCGGAGCAGACCTCTTACTACAGAGCAAGCTGCTCCGGTTC 240  
 DB 181 GCCCTCAGGGTGCACCTGCGGAGCAGACCTCTTACTACAGAGCAAGCTGCTCCGGTTC 240  
 QY 241 AGCAGATCATGTCGACCCACAGTTTCAACCGCCCAAGATGGAAGGAGATGCGCTTG 300  
 DB 241 AGCAGATCATGTCGACCCACAGTTTCAACCGCCCAAGATGGAAGGAGATGCGCTTG 300  
 QY 301 CTGAGAGTGAAGAGCGGTGAAGTCTCCAGCCAGTCACAGGTCAACCTGCCCCCT 360

```
Db      301 CTGAGACTGAGAGAGCGGTGAGAGTCTCCAGCCACGTCACACGCTCAACCTGCCCCCT 360
Qy      361 GCCTGAGAGACTCTTCCCCCGGGGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
Db      361 GCTTCAGAGACTTCCCCCGGGGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
Qy      421 AATGATGAGCGCTCCACCGCCATTTCTCTGAAGCAGGTGAAGTCCCATATGAA 480
Db      421 AATGATGAGCGCTCCACCGCCATTTCTCTGAAGCAGGTGAAGTCCCATATGAA 480
Qy      481 AACCAATTGTGTACCGCAAAATACACCTTGGCGCTTACACGGGAGACGACGTCCGATC 540
Db      481 AACCAATTGTGTACCGCAAAATACACCTTGGCGCTTACACGGGAGACGACGTCCGATC 540
Qy      541 GTCCTGAGACGACATGCTGTGCGGGAAACCCCGAGGACTCATGCGCAAGAGACGCC 600
Db      541 GTCCTGAGACGACATGCTGTGCGGGAAACCCCGAGGACTCATGCGCAAGAGACGCC 600
Qy      601 GCGGACCACTGTGTGTGCAAGTGAATGCACTGGCTGACGGCGGGCGTGTCACTGG 660
Db      601 GCGGACCACTGTGTGTGCAAGTGAATGCACTGGCTGACGGCGGGCGTGTCACTGG 660
Qy      661 GCGGAGGCGTGTGCGCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTTCTTG 720
Db      661 GCGGAGGCGTGTGCGCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTTCTTG 720
Qy      721 GACTGATCACCACCTATGTCTCCCAAAAAGCGTGAAGCGGCGCGTGTGT 771
Db      721 GACTGATCACCACCTATGTCTCCCAAAAAGCGTGAAGCGGCGCGTGTGT 771
```

```
RESULT 2
US-09-598-982C-42
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42
```

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Query Match          99.8%; Score 769.4; DB 1; Length 771;
Best Local Similarity 99.9%; Pred. No. 0.037; Indels 0; Gaps 0;
Matches 770; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTAGCTTGAAGATCCAGCGCCCACTAGTATGATGACTTTCTGCGGGGCTCCCTCANT 120
Db      61 CAGGTAGCTTGAAGATCCAGCGCCCACTAGTATGATGACTTTCTGCGGGGCTCCCTCANT 120
Qy      121 CACCCCAAGTGGTGTGACCGACGACGACGACGACGACGACGACGACGACGACGACGAC 180
Db      121 CACCCCAAGTGGTGTGACCGACGACGACGACGACGACGACGACGACGACGACGACGAC 180
```

```
Qy      181 GCCCTCAGGGTGCACCTGCGGGAGACGACCTCTTACTACAGAGACCAAGTGTGCGCGTTC 240
Db      181 GCCCTCAGGGTGCACCTGCGGGAGACGACCTCTTACTACAGAGACCAAGTGTGCGCGTTC 240
Qy      241 AGCAGGATATGATGACCAACCAAGTTCTTACACCGGCCAAGATGGAGCGGACATGCGCCTG 300
Db      241 AGCAGGATATGATGACCAACCAAGTTCTTACACCGGCCAAGATGGAGCGGACATGCGCCTG 300
Qy      301 CTGAGCTGAGAGACCGGTGAAAGTCTTCACGCCACGTCACACGATCAACCTGCCCCCT 360
Db      301 CTGAGCTGAGAGACCGGTGAAAGTCTTCACGCCACGTCACACGATCAACCTGCCCCCT 360
Qy      361 GCCTCAGAGACCTTCCCCCGGGGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
Db      361 GCCTCAGAGACCTTCCCCCGGGGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
Qy      421 AATGATGAGCGCTCCACCGCCATTTCTCTGAAGCAGGTGAAGTCCCATATGAA 480
Db      421 AATGATGAGCGCTCCACCGCCATTTCTCTGAAGCAGGTGAAGTCCCATATGAA 480
Qy      481 AACCAATTGTGTACCGCAAAATACCACTTGGCGCTTACACGGGAGACGACGTCCGATC 540
Db      481 AACCAATTGTGTACCGCAAAATACCACTTGGCGCTTACACGGGAGACGACGTCCGATC 540
Qy      541 GTCCTGAGACGACATGCTGTGCGGGAAACCCCGAGGACTCATGCGCAAGAGACGCC 600
Db      541 GTCCTGAGACGACATGCTGTGCGGGAAACCCCGAGGACTCATGCGCAAGAGACGCC 600
Qy      601 GCGGACCACTGTGTGTGCAAGTGAATGCACTGGCTGACGGCGGGCGTGTCACTGG 660
Db      601 GCGGACCACTGTGTGTGCAAGTGAATGCACTGGCTGACGGCGGGCGTGTCACTGG 660
Qy      661 GCGGAGGCGTGTGCGCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTTCTTG 720
Db      661 GCGGAGGCGTGTGCGCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTTCTTG 720
Qy      721 GACTGATCACCACCTATGTCTCCCAAAAAGCGTGAAGCGGCGCGTGTGT 771
Db      721 GACTGATCACCACCTATGTCTCCCAAAAAGCGTGAAGCGGCGCGTGTGT 771
```

```
RESULT 3
US-09-598-982C-24
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24
```

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Query Match          99.4%; Score 766.2; DB 1; Length 771;
Best Local Similarity 99.6%; Pred. No. 0.038; Indels 0; Gaps 0;
Matches 768; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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Qy      1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
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```
QY 61 CAGTGAAGCTGAGAGTCCACGGCCCACTATGAGATGCACTTTCGCGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAAGATCCACGGCCCACTATGAGATGCACTTTCGCGGGGCTCCCTCATC 120
QY 121 CACCCCACTGAGTGTGCTGACCGCAGCGCACTGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCACTGAGTGTGCTGACCGCAGCGCACTGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GCGCTCAGAGGTGCACTGCGGGAGCAGCACTTCTACTACAGAGACCAAGTCTGCCGGTTC 240
DB 181 GCGCTCAGAGGTGCACTGCGGGAGCAGCACTTCTACTACAGAGACCAAGTCTGCCGGTTC 240
QY 241 AGCAGGATCATGTGTCACCCACAGTTCTACACCGCCAGATGCGAGCGGACATGCGCCCTG 300
DB 241 AGCAGGATCATGTGTCACCCACAGTTCTACACCGCCAGATGCGAGCGGACATGCGCCCTG 300
QY 301 CTGAGAGCTGAGAGAGCGCGGTGAAGGTCTTCACGCAAGTCAACGCTCAACCTGCCCTCT 360
DB 301 CTGAGAGCTGAGAGAGCGCGGTGAAGGTCTTCACGCAAGTCAACGCTCAACCTGCCCTCT 360
QY 361 GCGTCAAGAGACCTTCCCGCGGGAGATGCGGTCTGAGTCACTGCGGGCGATGTGGAC 420
DB 361 GCGTCAAGAGACCTTCCCGCGGGAGATGCGGTCTGAGTCACTGCGGGCGATGTGGAC 420
QY 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAGAGCAGGTGAAGGTCCCAATATGGA 480
DB 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAGAGCAGGTGAAGGTCCCAATATGGA 480
QY 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACACGAGAGCAGCACTGCCGATC 540
DB 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACACGAGAGCAGCACTGCCGATC 540
QY 541 GTCCGTGAGCACTGTGTGTGCGCGGAAACACCGGAGGAACTCATGCCAAGAGACGCGC 600
DB 541 GTCCGTGAGCACTGTGTGTGCGCGGAAACACCGGAGGAACTCATGTCAAGGCGCACGCGC 600
QY 601 GCGGAGCACTGTGTGAGAGGTGAATGGCACTGCGCTGCAAGCGGGCGGTGCTCAAGCTGG 660
DB 601 GCGGAGCACTGTGTGAGAGGTGAATGGCACTGCGCTGCAAGCGGGCGGTGCTCAAGCTGG 660
QY 661 GCGGAGGCTGTGTGCCAGGCCAACCGGCTGGCATCTACACCGGTGCTCACTACTACTTG 720
DB 661 GCGGAGGCTGTGTGCCAGGCCAACCGGCTGGCATCTACACCGGTGCTCACTACTACTTG 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCTGCT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCTGCT 771

RESULT 4
US-09-598-982C-40
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
```

```
US-09-598-982C-40
Query Match 99.2%; Score 764.6; DB 1; Length 771;
Best Local Similarity 99.5%; Pred. No. 0.039;
Matches 767; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGAGCAATGAGCCCTGG 60
DB 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGAGCAATGAGCCCTGG 60
QY 61 CAGGTGAGCTTGAAGATCCACGGCCCACTATGATGCACTTTCGCGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAAGATCCACGGCCCACTATGATGCACTTTCGCGGGGCTCCCTCATC 120
QY 121 CACCCCACTGAGTGTGCTGACCGCAGCGCACTGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCACTGAGTGTGCTGACCGCAGCGCACTGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GCGCTCAGAGGTGCACTGCGGGAGCAGCACTTCTACTACAGAGACCAAGTCTGCCGGTTC 240
DB 181 GCGCTCAGAGGTGCACTGCGGGAGCAGCACTTCTACTACAGAGACCAAGTCTGCCGGTTC 240
QY 241 AGCAGGATCATGTGTCACCCACAGTTCTACACCGCCAGATGCGAGCGGACATGCGCCCTG 300
DB 241 AGCAGGATCATGTGTCACCCACAGTTCTACACCGCCAGATGCGAGCGGACATGCGCCCTG 300
QY 301 CTGAGAGCTGAGAGAGCGCGGTGAAGGTCTTCACGCAAGTCAACGCTCAACCTGCCCTCT 360
DB 301 CTGAGAGCTGAGAGAGCGCGGTGAAGGTCTTCACGCAAGTCAACGCTCAACCTGCCCTCT 360
QY 361 GCGTCAAGAGACCTTCCCGCGGGAGATGCGGTCTGAGTCACTGCGGGCGATGTGGAC 420
DB 361 GCGTCAAGAGACCTTCCCGCGGGAGATGCGGTCTGAGTCACTGCGGGCGATGTGGAC 420
QY 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAGAGCAGGTGAAGGTCCCAATATGGA 480
DB 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAGAGCAGGTGAAGGTCCCAATATGGA 480
QY 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACACGAGAGCAGCACTGCCGATC 540
DB 481 AACCAATTTGTGAGCGCAAAATACCACTTGGCGCTTACACGAGAGCAGCACTGCCGATC 540
QY 541 GTCCGTGAGCACTGTGTGTGCGGGAAACACCGGAGGAACTCATGCCAAGAGACGCGC 600
DB 541 GTCCGTGAGCACTGTGTGTGCGGGAAACACCGGAGGAACTCATGTCAAGGCGCACGCGC 600
QY 601 GCGGAGCACTGTGTGAGAGGTGAATGGCACTGCGCTGCAAGCGGGCGGTGCTCAAGCTGG 660
DB 601 GCGGAGCACTGTGTGAGAGGTGAATGGCACTGCGCTGCAAGCGGGCGGTGCTCAAGCTGG 660
QY 661 GCGGAGGCTGTGTGCCAGGCCAACCGGCTGGCATCTACACCGGTGCTCACTACTACTTG 720
DB 661 GCGGAGGCTGTGTGCCAGGCCAACCGGCTGGCATCTACACCGGTGCTCACTACTACTTG 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCTGCT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCTGCT 771

RESULT 5
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
```

; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: Patentin version 3.3  
 ; SEQ ID NO 8  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-8

Query Match 98.8%; Score 761.4; DB 1; Length 771;  
 Best Local Similarity 99.2%; Pred. No. 0.04;  
 Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

```

QY 1 GGGCCCCCTCGAGAAAAGATCTCGGGGGTCAGAGAGGCCCCAGAGACAAGTGGCCCTG 60
DB 1 GGGCCCCCTCGAGAAAAGATCTCGGGGGTCAGAGAGGCCCCAGAGACAAGTGGCCCTG 60
QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGTCTGACCGGACGCACTGCTGGAGACCGGACGTCMAAGATCTGGGC 180
DB 121 CACCCCAAGTGGTCTGACCGGACGCACTGCTGGAGACCGGACGTCMAAGATCTGGGC 180
QY 181 GGCCTCAGGGTGCAACTGCGGGAGACACCTCTACTACAGAGACCAAGCTGCGCGGTG 240
DB 181 GGCCTCAGGGTGCAACTGCGGGAGACACCTCTACTACAGAGACCAAGCTGCGCGGTG 240
QY 241 AGCAGATCATCTGTGACCCACAGTTCTACACCGCCCAAGTCGAGCGGACATGCGCTG 300
DB 241 AGCAGATCATCTGTGACCCACAGTTCTACACCGCCCAAGTCGAGCGGACATGCGCTG 300
QY 301 CTGAGACTGAGAGAGCGCGGTGAGTCTCAGGCAAGTCCACCGTCAACCGTCCCTG 360
DB 301 CTGAGACTGAGAGAGCGCGGTGAGTCTCAGGCAAGTCCACCGTCAACCGTCCCTG 360
QY 361 GGCCTCAGAGACTCTCCCGCGGGATGCGTCTGGGTCACTGGCTGGGGCGATGTGAC 420
DB 361 GGCCTCAGAGACTCTCCCGCGGGATGCGTCTGGGTCACTGGCTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAGCAAGTGAAGTCCCATATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAGCAAGTGAAGTCCCATATGAA 480
QY 481 AACCAATTGTGACGCAAAATACACTTGGGCGCTTACACGGGAGACGACGTCGCATC 540
DB 481 AACCAATTGTGACGCAAAATACACTTGGGCGCTTACACGGGAGACGACGTCGCATC 540
QY 541 GTCCTGAGACGACTGTGTGTCGGGAAACACCGGAGGGACTCATGCCAGAGACGCC 600
DB 541 GTCCTGAGACGACTGTGTGTCGGGAAACACCGGAGGGACTCATGCCAGAGACGCC 600
QY 601 GGCAGACCACTGTGTGCAAGTGAATGACCTTGGCTGACGGCGGCGTGTCACTG 660
DB 601 GGCAGACCACTGTGTGCAAGTGAATGACCTTGGCTGACGGCGGCGTGTCACTG 660
QY 661 GGGAGGGGCTGTGCGGACCGGACCGGCTGAGCTCAACCGGTGCACTTACTTG 720
DB 661 GGGAGGGGCTGTGCGGACCGGACCGGCTGAGCTCAACCGGTGCACTTACTTG 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
  
```

RESULT 6  
 US-09-598-982C-22  
 ; Sequence 22, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew

; APPLICANT: Mafilt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: Patentin version 3.3  
 ; SEQ ID NO 22  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-22

Query Match 98.3%; Score 758.2; DB 1; Length 771;  
 Best Local Similarity 99.0%; Pred. No. 0.04;  
 Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

```

QY 1 GGGCCCCCTCGAGAAAAGATCTCGGGGGTCAGAGAGGCCCCAGAGACAAGTGGCCCTG 60
DB 1 GGGCCCCCTCGAGAAAAGATCTCGGGGGTCAGAGAGGCCCCAGAGACAAGTGGCCCTG 60
QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGTCTGACCGGACGCACTGCTGGAGACCGGACGTCMAAGATCTGGGC 180
DB 121 CACCCCAAGTGGTCTGACCGGACGCACTGCTGGAGACCGGACGTCMAAGATCTGGGC 180
QY 181 GGCCTCAGGGTGCAACTGCGGGAGACACCTCTACTACAGAGACCAAGCTGCGCGGTG 240
DB 181 GGCCTCAGGGTGCAACTGCGGGAGACACCTCTACTACAGAGACCAAGCTGCGCGGTG 240
QY 241 AGCAGATCATCTGTGACCCACAGTTCTACACCGCCCAAGTCGAGCGGACATGCGCTG 300
DB 241 AGCAGATCATCTGTGACCCACAGTTCTACACCGCCCAAGTCGAGCGGACATGCGCTG 300
QY 301 CTGAGACTGAGAGAGCGCGGTGAGTCTCAGGCAAGTCCACCGTCAACCGTCCCTG 360
DB 301 CTGAGACTGAGAGAGCGCGGTGAGTCTCAGGCAAGTCCACCGTCAACCGTCCCTG 360
QY 361 GGCCTCAGAGACTCTCCCGCGGGATGCGTCTGGGTCACTGGCTGGGGCGATGTGAC 420
DB 361 GGCCTCAGAGACTCTCCCGCGGGATGCGTCTGGGTCACTGGCTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAGCAAGTGAAGTCCCATATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAGCAAGTGAAGTCCCATATGAA 480
QY 481 AACCAATTGTGACGCAAAATACACTTGGGCGCTTACACGGGAGACGACGTCGCATC 540
DB 481 AACCAATTGTGACGCAAAATACACTTGGGCGCTTACACGGGAGACGACGTCGCATC 540
QY 541 GTCCTGAGACGACTGTGTGTCGGGAAACACCGGAGGGACTCATGCCAGAGACGCC 600
DB 541 GTCCTGAGACGACTGTGTGTCGGGAAACACCGGAGGGACTCATGCCAGAGACGCC 600
QY 601 GGCAGACCACTGTGTGCAAGTGAATGACCTTGGCTGACGGCGGCGTGTCACTG 660
DB 601 GGCAGACCACTGTGTGCAAGTGAATGACCTTGGCTGACGGCGGCGTGTCACTG 660
QY 661 GGGAGGGGCTGTGCGGACCGGACCGGCTGAGCTCAACCGGTGCACTTACTTG 720
DB 661 GGGAGGGGCTGTGCGGACCGGACCGGCTGAGCTCAACCGGTGCACTTACTTG 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
  
```

Db 721 GACTGATCCACCACTATGTCCCAAAAAGCGTGAAAGCGCGCGTGT 771

RESULT 7  
US-09-598-982C-38  
; Sequence 38, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 38  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-38

Query Match 98.1%; Score 756.6; DB 1; Length 771;  
Best Local Similarity 98.8%; Pred. No. 0.042;  
Matches 762; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGAGAGGCCGCCGAGAGCAAGTGGCCCTGG 60  
Db 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTGAGAGGCCGCCGAGAGCAAGTGGCCCTGG 60  
QY 61 CAGGTGAGCTGAGAGTCCAGCGGCCATATCTGAGTGCATTTCTGGGGGGCTCCCTCATC 120  
Db 61 CAGGTGAGCTGAGAGTCCAGCGGCCATATCTGAGTGCATTTCTGGGGGGCTCCCTCATC 120  
QY 121 CACCCCAAGTGGGTGTCACCGAGCGCATGCGTGGGACCGGAGCGTCAAGGATCTGGCC 180  
Db 121 CACCCCAAGTGGGTGTCACCGAGCGCATGCGTGGGACCGGAGCGTCAAGGATCTGGCC 180  
QY 181 GCCCTCAGGGTCAACTGCGGGAGAGCACTCTACTACAGAGCAAGCTGTCGCGTTC 240  
Db 181 GCCCTCAGGGTCAACTGCGGGAGAGCACTCTACTACAGAGCAAGCTGTCGCGTTC 240  
QY 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATGGAGCGGACATCGCCCTG 300  
Db 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATGGAGCGGACATCGCCCTG 300  
QY 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATGGAGCGGACATCGCCCTG 300  
Db 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATGGAGCGGACATCGCCCTG 300  
QY 301 CTGAGAGCTGAGAGAGCGGGTGAAGGTCTGCAGCGCATGTCACAGGTCACCTGCCCCCT 360  
Db 301 CTGAGAGCTGAGAGAGCGGGTGAAGGTCTGCAGCGCATGTCACAGGTCACCTGCCCCCT 360  
QY 361 GCCTCAGAGACCTTCCCCCGGGAGTCCGCTGCGGTCACTGGCGTGGGCGATGGAGC 420  
Db 361 GCCTCAGAGACCTTCCCCCGGGAGTCCGCTGCGGTCACTGGCGTGGGCGATGGAGC 420  
QY 421 AATGATGAGCGCTCCCAACCGGCAATTTCTCTGAGAGAGGTGAAGTCCCATTAATGAA 480  
Db 421 AATGATGAGCGCTCCCAACCGGCAATTTCTCTGAGAGAGGTGAAGTCCCATTAATGAA 480  
QY 481 AACCAATTTTGAACGCAAAATACACCTTGGGCGCTTACACGGGAGAGACAGTCCGCATC 540  
Db 481 AACCAATTTTGAACGCAAAATACACCTTGGGCGCTTACACGGGAGAGACAGTCCGCATC 540  
QY 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCCGAGGGAATCATGCCAAGAGAGCGCC 600  
Db 541 GTCCGTGACGACATGCTGTGTGCGGGGAAACCCCGAGGGAATCATGCCAAGAGAGCGCC 600

QY 601 GCGGACCACTGATGTGCAAGTGAATGAGCACTGTGTCAGAGCGGCGTGTGAGCTGG 660  
Db 601 GCGGACCACTGATGTGCAAGTGAATGAGCACTGTGTCAGAGCGGCGTGTGAGCTGG 660  
QY 661 GCGGAGGCTGTGTCAGAGCCCAACCGGCGTGGCATCTACACCGTGTCACTACTTGG 720  
Db 661 GCGGAGGCTGTGTCAGAGCCCAACCGGCGTGGCATCTACACCGTGTCACTACTTGG 720  
QY 721 GACTGATCCACCACTATGTCCCAAAAAGCGTGAAAGCGCGCGCTGT 771  
Db 721 GACTGATCCACCACTATGTCCCAAAAAGCGTGAAAGCGCGCGCTGT 771

RESULT 8  
US-09-598-982C-20  
; Sequence 20, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 20  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-20

Query Match 97.9%; Score 755; DB 1; Length 771;  
Best Local Similarity 98.7%; Pred. No. 0.042;  
Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTGCGGGGTGAGAGGCCGCCGAGAGCAATGGCCCTGG 60  
Db 1 GGGCCCCCTCGAGAAAAGATGTGCGGGGTGAGAGGCCGCCGAGAGCAATGGCCCTGG 60  
QY 61 CAGGTGAGCTGAGAGTCCAGCGGCCATATCTGAGTGCATTTCTGCGGGGCTCCCTCATC 120  
Db 61 CAGGTGAGCTGAGAGTCCAGCGGCCATATCTGAGTGCATTTCTGCGGGGCTCCCTCATC 120  
QY 121 CACCCCAAGTGGGTGTCACCGAGCGCATGCGTGGGACCGGAGCGTCAAGGATCTGGCC 180  
Db 121 CACCCCAAGTGGGTGTCACCGAGCGCATGCGTGGGACCGGAGCGTCAAGGATCTGGCC 180  
QY 181 GCCCTCAGGGTCAACTGCGGGAGAGCACTCTACTACAGAGCAAGCTGTCGCGTTC 240  
Db 181 GCCCTCAGGGTCAACTGCGGGAGAGCACTCTACTACAGAGCAAGCTGTCGCGTTC 240  
QY 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATGGAGCGGACATCGCCCTG 300  
Db 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATGGAGCGGACATCGCCCTG 300  
QY 301 CTGAGAGCTGAGAGAGCGGGTGAAGGTCTGCAGCGCATGTCACAGGTCACCTGCCCCCT 360  
Db 301 CTGAGAGCTGAGAGAGCGGGTGAAGGTCTGCAGCGCATGTCACAGGTCACCTGCCCCCT 360  
QY 361 GCCTCAGAGACCTTCCCCCGGGAGTCCGCTGCGGTCACTGGCGTGGGCGATGGAGC 420  
Db 361 GCCTCAGAGACCTTCCCCCGGGAGTCCGCTGCGGTCACTGGCGTGGGCGATGGAGC 420  
QY 421 AATGATGAGCGCTCCCAACCGGCAATTTCTCTGAGAGAGGTGAAGTCCCATTAATGAA 480  
Db 421 AATGATGAGCGCTCCCAACCGGCAATTTCTCTGAGAGAGGTGAAGTCCCATTAATGAA 480

```

Qy 481 AACCAATTGTGACGCAAAATACACCTTGGCGCTTACACGGAGACGAGTCCGATC 540
Db 481 AACCAATTGTGACGCAAAATACACCTTGGCGCTTACACGGAGACGAGTCCGATC 540
Qy 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGAGCTCATGCCAGAGACGCC 600
Db 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGAGCTCATGCCAGAGACGCC 600
Qy 601 GCGGACCACTGAGTGTGCAAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGCAGCTGG 660
Db 601 GCGGAGGCGCTGTGTGTGTCAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGCAGCTGG 660
Qy 661 GCGGAGGCGCTGTGTGTGTCAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGCAGCTGG 720
Db 661 GCGGAGGCGCTGTGTGTGTCAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGCAGCTGG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771

```

RESULT 9  
US-09-598-982C-36  
; Sequence 36, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maflett, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-36

```

Query Match 97.7%; Score 753.4; DB 1; Length 771;  
Best Local Similarity 98.6%; Pred. No. 0.043; Indels 0; Gaps 0;  
Matches 760; Conservative 0; Mismatches 11;

```

Qy 1 GGGCCCCCTGAGAAAAGATGTCGCGGGTCAAGAGGCCGCCAGAGCAAGTGGCCCTGG 60
Db 1 GGGCCCCCTGAGAAAAGATGTCGCGGGTCAAGAGGCCGCCAGAGCAAGTGGCCCTGG 60
Qy 61 CAGGTAGGCTGAGAGTCAAGGCGCCATCTGATGATGATGATGATGATGATGATGATGATG 120
Db 61 CAGGTAGGCTGAGAGTCAAGGCGCCATCTGATGATGATGATGATGATGATGATGATGATG 120
Qy 121 CACCCCAAGTGGTGTGACCGGCGCGCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 180
Db 121 CACCCCAAGTGGTGTGACCGGCGCGCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 180
Qy 181 GCGCTCAGGAGTCAAGTGTGCGGAGAGCACTCTAATCAAGAGACAGTGTGCGGATC 240
Db 181 GCGCTCAGGAGTCAAGTGTGCGGAGAGCACTCTAATCAAGAGACAGTGTGCGGATC 240
Qy 241 AGCAGAGTCAATGTGACCCACAGTTCTACACCGCCAGATGCGAGCGGAGCATGCGCTTG 300
Db 241 AGCAGAGTCAATGTGACCCACAGTTCTACACCGCCAGATGCGAGCGGAGCATGCGCTTG 300
Qy 301 CTGAGGTGAGAGAGCGGAGAGTGTCTCAAGCCAGTCCACACGATCACTTCCCTCCCT 360
Db 301 CTGAGGTGAGAGAGCGGAGAGTGTCTCAAGCCAGTCCACACGATCACTTCCCTCCCT 360

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Db 301 CTGAGGTGAGAGAGCGGAGAGTGTCTCAAGCCAGTCCACACGATCACTTCCCTCCCT 360
Qy 361 GCGTCAAGAGACCTTCCCGCGGAGATGCGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
Db 361 GCGTCAAGAGACCTTCCCGCGGAGATGCGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
Qy 421 AATGATGAGCGCTTCCACCGCATTTTCTGTGAAGAGTGTGAAGTGTGTGTGTGTGTGTGT 480
Db 421 AATGATGAGCGCTTCCACCGCATTTTCTGTGAAGAGTGTGAAGTGTGTGTGTGTGTGTGT 480
Qy 481 AACCAATTGTGACGCAAAATACACCTTGGCGCTTACACGGAGACGAGTCCGATC 540
Db 481 AACCAATTGTGACGCAAAATACACCTTGGCGCTTACACGGAGACGAGTCCGATC 540
Qy 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGAGCTCATGCCAGAGACGCC 600
Db 541 GTCCGTGACGACATGCTGTGTGTCGGGGAACCCCGAGGAGCTCATGCCAGAGACGCC 600
Qy 601 GCGGACCACTGAGTGTGCAAGTGAATGAGCACTGGCTGACAGGCGGCGTGTGAGCTGG 660
Db 601 GCGGAGGCGCTGTGTGTGTCAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGTGAGCTGG 660
Qy 661 GCGGAGGCGCTGTGTGTGTCAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGTGAGCTGG 720
Db 661 GCGGAGGCGCTGTGTGTGTCAGAGTGAATGAGCACTGGCTGACAGGCGGCGTGTGAGCTGG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGCT 771

```

RESULT 10  
US-09-598-982C-10  
; Sequence 10, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maflett, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
; US-09-598-982C-10

```

Query Match 94.1%; Score 725.4; DB 1; Length 735;  
Best Local Similarity 99.2%; Pred. No. 0.059; Indels 6; Gaps 0;  
Matches 729; Conservative 0; Mismatches 6;

```

Qy 19 ATGCTGCGGGGTCAAGAGGCCGCCAGAGACAGTGGCCCTGGCAAGTGAAGTGAAGTGC 78
Db 1 ATGCTGCGGGGTCAAGAGGCCGCCAGAGACAGTGGCCCTGGCAAGTGAAGTGAAGTGC 78
Qy 79 CAGGCGCATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 138
Db 79 CAGGCGCATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 138
Qy 139 ACCGAGCGCACTGTGTGTGCGGAGCCGAGCTCAAGATGATGATGATGATGATGATGATG 198
Db 139 ACCGAGCGCACTGTGTGTGCGGAGCCGAGCTCAAGATGATGATGATGATGATGATGATG 198
Qy 199 CCGAGACAGACCTCTAATCAAGAGACAGTGTGCGGAGTCAAGAGATCAATCGTGAC 258
Db 199 CCGAGACAGACCTCTAATCAAGAGACAGTGTGCGGAGTCAAGAGATCAATCGTGAC 258

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```
Db 181 CGGAGACGACCTTACTTACACGAGACGAGCTGCTCCGGTACGAGATCATCTGTGAC 240
Qy 259 CCACAGTTCTACACCGCCAGATCGAGGAGCATCGCCCTGTGAGTGAAGAGCCG 318
Db 241 CCACAGTTCTACACCGCCAGATCGAGGAGCATCGCCCTGTGAGTGAAGAGCCG 300
Qy 319 GTGAAGTCTTCCAGCAGCTTCCACAGCTGACCTTCCCTGCTTCCAGAGCTTTCC 378
Db 301 GTGAAGTCTTCCAGCAGCTTCCACAGCTGACCTTCCCTGCTTCCAGAGCTTTCC 360
Qy 379 CCGGGGATCCCGTGTGGTCACTGGCTGGGCGATGTGGAACAATGATGAGGCTCCCA 438
Db 361 CCGGGGATCCCGTGTGGTCACTGGCTGGGCGATGTGGAACAATGATGAGGCTCCCA 420
Qy 439 CCGGCATTTCTGTGAAGCAGGTGAAGTCCCATTAATGAAACCACTTTGTGACGA 498
Db 421 CCGGCATTTCTGTGAAGCAGGTGAAGTCCCATTAATGAAACCACTTTGTGACGA 480
Qy 499 AATATACCACTTGGGCGCTTACACGGGAGACAGCTCCGATGCTCCGTGACGACATGCTG 558
Db 481 AATATACCACTTGGGCGCTTACACGGGAGACAGCTCCGATGCTCCGTGACGACATGCTG 540
Qy 559 TGTGCGGGAGACACCGGAGGAGCTCATGCAAGAGACGCGGCGGACCACTGGTGTGC 618
Db 541 TGTGCGGGAGACACCGGAGGAGCTCATGCAAGGCGGACCTCCGAGGCGCTGGTGTGC 600
Qy 619 AAGGTGAATGACACCTGTGAGGCGGCGGTGTCACTGAGTGGGCGAGGGCTGTGCCAG 678
Db 601 AAGGTGAATGACACCTGTGAGGCGGCGGTGTCACTGAGTGGGCGAGGGCTGTGCCAG 660
Qy 679 CCCAACCGGCTGGATCTACACCGCTGTCACTTGTGATCTGATCCACCATAT 738
Db 661 CCCAACCGGCTGGATCTACACCGCTGTCACTTGTGATCTGATCCACCATAT 720
Qy 739 GTCCCCAAAAGCCG 753
Db 721 GTCCCCAAAAGCCG 735

RESULT 11
US-09-598-982C-8/c
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-8

Query Match 3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
Qy 1 GGGCCCTCTGAGAAAAGATGCTGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCGGTGACTCTGAGGCTCACCTGCCAGGGC 54
```

```
Qy 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATTAAGTACGACTTCTGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTTGACCCCGACGATTTCTTTCTGAGGGGGCC 1
```

```
RESULT 12
US-09-598-982C-20/c
; Sequence 20, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-20

Query Match 3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
Qy 1 GGGCCCTCTGAGAAAAGATGCTGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGCAGAAAGTGCATCCAGTATGGGCGGTGACTCTCAGGCTCACCTGCCAGGGC 54
Qy 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATTAAGTACGACTTCTGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTTGACCCCGACGATTTCTTTCTGAGGGGGCC 1
```

```
RESULT 13
US-09-598-982C-22/c
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-22
```

```
Query Match 3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
Qy 1 GGGCCCTCTGAGAAAAGATGCTGGGGGTCAAGAGGCCCCGAGAGCAAGTGGCCCTGG 60
```

Db 113 GAGCCCCCGAGAGATGATCCAGTATGGCCCGTGAATCTCTCAGGCTCACTGCGCAGAGGC 54  
QY 61 CAGGTGAGCCTTGAGATCCAGGCGCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTTACCCCGACGATTTCTTCTCGAGGGGCC 1

## RESULT 14

US-09-598-982C-24/c  
; Sequence 24, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Mafilt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 24  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-24

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCCAGAGAGCCCCGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAGATGATCCAGTATGGCCCGTGAATCTCTCAGGCTCACTGCGCAGAGGC 54  
QY 61 CAGGTGAGCCTTGAGATCCAGGCGCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTTACCCCGACGATTTCTTCTCGAGGGGCC 1

## RESULT 15

US-09-598-982C-26/c  
; Sequence 26, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Mafilt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 26  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-26

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;

Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCCAGAGAGCCCCGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAGATGATCCAGTATGGCCCGTGAATCTCTCAGGCTCACTGCGCAGAGGC 54  
QY 61 CAGGTGAGCCTTGAGATCCAGGCGCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTTACCCCGACGATTTCTTCTCGAGGGGCC 1

## RESULT 16

US-09-598-982C-36/c  
; Sequence 36, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Mafilt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 36  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-36

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCCAGAGAGCCCCGAGCAAGTGGCCCTGG 60  
Db 113 GAGCCCCCGAGAGATGATCCAGTATGGCCCGTGAATCTCTCAGGCTCACTGCGCAGAGGC 54  
QY 61 CAGGTGAGCCTTGAGATCCAGGCGCATCTGATGCACTTCTGCGGGGCTC 113  
Db 53 CACTTGCTCTGGGGGCTCTCTTACCCCGACGATTTCTTCTCGAGGGGCC 1

## RESULT 17

US-09-598-982C-38/c  
; Sequence 38, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Mafilt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 38  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-38

```

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60
DB 113 GAGCCCCCGCAGAGATGATTCAGATATGGCGGTGACTCTCAGGCTCAGCTGCCAGGCG 54
QY 61 CAGGTGAGCTGTAGAGTCCAGCGCCATATCTGATGCACTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTCTGGGGGCTCTCTGACCCCGCAGAGATTCTTTCTCGAGGGGGCC 1

RESULT 18
US-09-598-982C-40/C
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60
DB 113 GAGCCCCCGCAGAGATGATTCAGATATGGCGGTGACTCTCAGGCTCAGCTGCCAGGCG 54
QY 61 CAGGTGAGCTGTAGAGTCCAGCGCCATATCTGATGCACTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTCTGGGGGCTCTCTGACCCCGCAGAGATTCTTTCTCGAGGGGGCC 1

RESULT 19
US-09-598-982C-42/C
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:

```

```

; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60
DB 113 GAGCCCCCGCAGAGATGATTCAGATATGGCGGTGACTCTCAGGCTCAGCTGCCAGGCG 54
QY 61 CAGGTGAGCTGTAGAGTCCAGCGCCATATCTGATGCACTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTCTGGGGGCTCTCTGACCCCGCAGAGATTCTTTCTCGAGGGGGCC 1

RESULT 20
US-09-598-982C-10/C
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

Query Match      3.5%; Score 27.2; DB 1; Length 735;
Best Local Similarity 52.9%; Pred. No. 18;
Matches 100; Conservative 0; Mismatches 83; Indels 6; Gaps 2;

QY 286 GCGGACATGCGCTCTGAGACTGAGAGCGCGTGAAGTCTTCAGGCCAGTCCACG 345
DB 453 GGGGACCTTCACTGCTTCAAGAGAAATGGCGTGGAGGGGCTCATTTGTCCACA-- 396
QY 346 GTACACCTGCCCCCTGCTCAAGACCTTCCCCCGGGGAGATCCGTGTGGGTCACTGGC 405
DB 395 -TTCGCCAGCAGTGAACCCAGACGCGCATCCCCGGGGGAAAGTCTCTGAGGCGAGGGG 337
QY 406 TGGGGCGA---TGTGACAATGATGAGCGCTCCACCGCATTTCTCTGAAGAGGTG 462
DB 336 CAGGTGACCGTGTGAGAGTGTGAGACCTTCAACGGCTCTCCAGCTCAGAGAGGCG 277
QY 463 AAGTCCCC 471
DB 276 GATGTCCGC 268

```

Search completed: August 26, 2005, 12:32:32  
 Job time : 3.81314 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 26, 2005, 12:31:55 ; Search time 2.81314 Seconds



(without alignments)  
4.206 Million cell updates/sec

Title: US-09-598-982C-36

Perfect score: 771  
Sequence: 1 gggccctcgagaaaaaat.....cgtgaagcgccgcctcgt 771Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 0.5

Searched: 10 seqs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
Maximum DB seq length: infPost-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 20 summaries

Database : US09598982C\_rev.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	771	100.0	771	1	US-09-598-982C-36
2	769.4	99.8	771	1	US-09-598-982C-20
3	763	99.0	771	1	US-09-598-982C-8
4	761.4	98.8	771	1	US-09-598-982C-38
5	759.8	98.5	771	1	US-09-598-982C-22
6	755	97.9	771	1	US-09-598-982C-40
7	755	97.9	771	1	US-09-598-982C-42
8	753.4	97.7	771	1	US-09-598-982C-24
9	753.4	97.7	771	1	US-09-598-982C-26
10	727	94.3	735	1	US-09-598-982C-10
11	32.4	4.2	771	1	US-09-598-982C-20
12	32.4	4.2	771	1	US-09-598-982C-36
13	28.2	3.7	771	1	US-09-598-982C-8
14	28.2	3.7	771	1	US-09-598-982C-22
15	28.2	3.7	771	1	US-09-598-982C-24
16	28.2	3.7	771	1	US-09-598-982C-26
17	28.2	3.7	771	1	US-09-598-982C-38
18	28.2	3.7	771	1	US-09-598-982C-40
19	28.2	3.7	771	1	US-09-598-982C-42
20	27.6	3.6	735	1	US-09-598-982C-10

## ALIGNMENTS

RESULT 1  
US-09-598-982C-36  
; Sequence 36, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Mafilt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3

; SEQ ID NO 36  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-36

Query Match 100.0%; Score 771; DB 1; Length 771;  
Best local similarity 100.0%; Pred. No. 0.036;  
Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY      1 GGGCCCTCGAGAAAAAATGCTCGGGGCTCAGAGAGCCCGGAGAGCAAGTGGCCCTGG 60
DB      1 GGGCCCTCGAGAAAAAAGATCGTCGGGGGTCAAGAGGCCCCCAGAGAGCAAGTGGCCCTGG 60

QY      61 CAGGTGAGCTGAGAGTCAAGGTCAGGCGCCATGATGATGACCTTGTGCGGGGCTCTTCATC 120
DB      61 CAGGTGAGCTGAGAGTCAAGGTCAGGCGCCATGATGATGACCTTGTGCGGGGCTCTTCATC 120

QY      121 CACCCCAAGTGGGTCTGACCGCGCGGCGTGGAGCCGACGTCAAGATCTGACC 180
DB      121 CACCCCAAGTGGGTCTGACCGCGCGGCGTGGAGCCGACGTCAAGATCTGACC 180

QY      181 GCGCTCAGGGTCAACTGCGGGAGCAGCACTTACTTACAGAGACACTGTGCGGTC 240
DB      181 GCGCTCAGGGTCAACTGCGGGAGCAGCACTTACTTACAGAGACACTGTGCGGTC 240

QY      241 AGCAGGATCATGATGACCAACCAAGTTCTTACACCGGCGGATCGAGCGGACATCGCCCTG 300
DB      241 AGCAGGATCATGATGACCAACCAAGTTCTTACACCGGCGGATCGAGCGGACATCGCCCTG 300

QY      301 CTGAGCTGAGAGAGCCGGTGAACGTCTTCAGACACGTTCACACGTCACCTGCGCCCT 360
DB      301 CTGAGCTGAGAGAGCCGGTGAACGTCTTCAGACACGTTCACACGTCACCTGCGCCCT 360

QY      361 GCGCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGGTCACTGGTGGGGGCAATGTGAC 420
DB      361 GCGCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGGTCACTGGTGGGGGCAATGTGAC 420

QY      421 AATGATGAGCGGCTCCCAACCGCATTTCTCTGAAGCAGTGAAGTCCCAATAATGAA 480
DB      421 AATGATGAGCGGCTCCCAACCGCATTTCTCTGAAGCAGTGAAGTCCCAATAATGAA 480

QY      481 AACCAATTGTGAGCAGCAAAATACCACTTGCGGCTTACAGGAGACGATCGGCATC 540
DB      481 AACCAATTGTGAGCAGCAAAATACCACTTGCGGCTTACAGGAGACGATCGGCATC 540

QY      541 GTCCGTGACGATGCTGTGTGCGGGAAACACCCGAGAGACTCATGCGAGGCGATCC 600
DB      541 GTCCGTGACGATGCTGTGTGCGGGAAACACCCGAGAGACTCATGCGAGGCGATCC 600

QY      601 GGAGGGGCGGCTGTGTGCAAGGTGAATGACCTGGCTGACAGGCGGGGCTGTGACTGG 660
DB      601 GGAGGGGCGGCTGTGTGCAAGGTGAATGACCTGGCTGACAGGCGGGGCTGTGACTGG 660

QY      661 GGCGAGGGCTGTGCGCAGCCCAACCGGCTGTGATCAACCCGCTGTGATCACTTGG 720
DB      661 GGCGAGGGCTGTGCGCAGCCCAACCGGCTGTGATCAACCCGCTGTGATCACTTGG 720

QY      721 GACTGATTCACCATATGTGCCCAAAAAGCCGTAAACCGGCGGCGGTCT 771
DB      721 GACTGATTCACCATATGTGCCCAAAAAGCCGTAAACCGGCGGCGGTCT 771

```

RESULT 2  
US-09-598-982C-20  
; Sequence 20, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Mafilt, Mark  
; APPLICANT: Haak-Frendescho, Mary

```

/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ TITLE OF INVENTION: AND METHODS OF MAKING SAME
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ PRIOR FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 20
/ LENGTH: 771
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (7)..(753)
/ US-09-598-982C-20

```

Query Match 99.8%; Score 769.4; DB 1; Length 771;

Best Local Similarity 99.9%; Pred. No. 0.036; Mismatches 1; Indels 0; Gaps 0;

Matches 770; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 GGGCCCTTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCAGAGCAAGTGCCCTGG 60
DB 1 GGGCCCTTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCAGAGCAAGTGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGAGTCACTTTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGAGTCACTTTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCACTGGAGTGTGACCGCGCGGGGTGCTGAGGACCGGACGTCAGAGATCTGACC 180
DB 121 CACCCCACTGGAGTGTGACCGCGCGGGGTGCTGAGGACCGGACGTCAGAGATCTGACC 180
QY 181 GCCCTCAGGGGTCAACCTGCGGAGAGCACTTCTACTACAGAGCAAGCTGTCGCGGTG 240
DB 181 GCCCTCAGGGGTCAACCTGCGGAGAGCACTTCTACTACAGAGCAAGCTGTCGCGGTG 240
QY 241 ACCAGATCATGTGACCCCAAGTTCTACCCGCAATGAGAGCGGACATCCGCTG 300
DB 241 ACCAGATCATGTGACCCCAAGTTCTACCCGCAATGAGAGCGGACATCCGCTG 300
QY 301 CTGAGAGCTGAGAGCGCGGTGAACGTCACAGCAAGTCACACGCTGACCCCTG 360
DB 301 CTGAGAGCTGAGAGCGCGGTGAACGTCACAGCAAGTCACACGCTGACCCCTG 360
QY 361 GCGTCAGAGACTTCCCGCGGGAGTCCGTGCTGAGTCACTGCTGAGGCGATGTGAC 420
DB 361 GCGTCAGAGACTTCCCGCGGGAGTCCGTGCTGAGTCACTGCTGAGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGGCACTTCTGAGAGAGTGAAGTCCCATTAATGAA 480
DB 421 AATGATGAGCGCTCCACCGGCACTTCTGAGAGAGTGAAGTCCCATTAATGAA 480
QY 481 AACCAATTGTGACGCAAAATACCACTTGGGCTTACAGCGGAGAGACAGCGCCGATC 540
DB 481 AACCAATTGTGACGCAAAATACCACTTGGGCTTACAGCGGAGAGACAGCGCCGATC 540
QY 541 GTCGCTGACGACATGCTGTGTGTCGCGGAAACCCCGAGGAGACTCATGCCAGGCGA 600
DB 541 GTCGCTGACGACATGCTGTGTGTCGCGGAAACCCCGAGGAGACTCATGCCAGGCGA 600
QY 601 GAGAGGCGCTGCTGAGAGTGAATGGCACTGCTGAGAGGCGGCGTGTGAGCTGG 660
DB 601 GAGAGGCGCTGCTGAGAGTGAATGGCACTGCTGAGAGGCGGCGTGTGAGCTGG 660
QY 661 GCGAGGAGCTGTGCGCAGCCCAACCGGCTGAGATTAACCGGTGTCACTACTACTTG 720
DB 661 GCGAGGAGCTGTGCGCAGCCCAACCGGCTGAGATTAACCGGTGTCACTACTACTTG 720
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGGCGCGCTGT 771
DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGGCGCGCTGT 771

```

# RESULT 3

US-09-598-982C-8

/ Sequence 8, Application US/09598982C

/ GENERAL INFORMATION:

/ APPLICANT: Niles, Andrew

/ APPLICANT: Maffei, Mark

/ APPLICANT: Haak-Frendrich, Mary

/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

/ TITLE OF INVENTION: AND METHODS OF MAKING SAME

/ FILE REFERENCE: 34506.104

/ CURRENT APPLICATION NUMBER: US/09/598,982C

/ PRIOR FILING DATE: 2000-06-21

/ PRIOR FILING DATE: 1998-04-15

/ NUMBER OF SEQ ID NOS: 52

/ SOFTWARE: PatentIn version 3.3

/ SEQ ID NO 8

/ LENGTH: 771

/ TYPE: DNA

/ ORGANISM: Homo sapiens

/ FEATURE:

/ NAME/KEY: CDS

/ LOCATION: (7)..(753)

/ US-09-598-982C-8

Query Match 99.0%; Score 763; DB 1; Length 771;

Best Local Similarity 99.4%; Pred. No. 0.039; Mismatches 5; Indels 0; Gaps 0;

Matches 766; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

QY 1 GGGCCCTTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCAGAGCAAGTGCCCTGG 60
DB 1 GGGCCCTTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCGCCAGAGCAAGTGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGAGTCACTTTGCGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGAGTCACTTTGCGGGGGCTCCCTCATC 120
QY 121 CACCCCACTGGAGTGTGACCGCGCGGGGTGCTGAGGACCGGACGTCAGAGATCTGACC 180
DB 121 CACCCCACTGGAGTGTGACCGCGCGGGGTGCTGAGGACCGGACGTCAGAGATCTGACC 180
QY 181 GCCCTCAGGGGTCAACCTGCGGAGAGCACTTCTACTACAGAGCAAGCTGTCGCGGTG 240
DB 181 GCCCTCAGGGGTCAACCTGCGGAGAGCACTTCTACTACAGAGCAAGCTGTCGCGGTG 240
QY 241 ACCAGATCATGTGACCCCAAGTTCTACCCGCAATGAGAGCGGACATCCGCTG 300
DB 241 ACCAGATCATGTGACCCCAAGTTCTACCCGCAATGAGAGCGGACATCCGCTG 300
QY 301 CTGAGAGCTGAGAGCGCGGTGAACGTCACAGCAAGTCACACGCTGACCCCTG 360
DB 301 CTGAGAGCTGAGAGCGCGGTGAACGTCACAGCAAGTCACACGCTGACCCCTG 360
QY 361 GCGTCAGAGACTTCCCGCGGGAGTCCGTGCTGAGTCACTGCTGAGGCGATGTGAC 420
DB 361 GCGTCAGAGACTTCCCGCGGGAGTCCGTGCTGAGTCACTGCTGAGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCACCGGCACTTCTGAGAGAGTGAAGTCCCATTAATGAA 480
DB 421 AATGATGAGCGCTCCACCGGCACTTCTGAGAGAGTGAAGTCCCATTAATGAA 480
QY 481 AACCAATTGTGACGCAAAATACCACTTGGGCTTACAGCGGAGAGACAGCGCCGATC 540
DB 481 AACCAATTGTGACGCAAAATACCACTTGGGCTTACAGCGGAGAGACAGCGCCGATC 540
QY 541 GTCGCTGACGACATGCTGTGTGTCGCGGAAACCCCGAGGAGACTCATGCCAGGCGA 600
DB 541 GTCGCTGACGACATGCTGTGTGTCGCGGAAACCCCGAGGAGACTCATGCCAGGCGA 600
QY 601 GAGAGGCGCTGCTGAGAGTGAATGGCACTGCTGAGAGGCGGCGTGTGAGCTGG 660
DB 601 GAGAGGCGCTGCTGAGAGTGAATGGCACTGCTGAGAGGCGGCGTGTGAGCTGG 660

```

```
Db      601 GAGAGGCCCTGTGTGTGCAAGTGAATGCACTGTGCTGCAAGCGGCGGTGTCACTG 660
Qy      661 GCGAGGGCTGTGTGCTCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTGG 720
Db      661 GCGAGGGCTGTGTGCTCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTGG 720
Qy      721 GACTGATCCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGGTGT 771
Db      721 GACTGATCCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGGTGT 771

RESULT 4
US-09-598-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

Query Match      98.8%; Score 761.4; DB 1; Length 771;
Best local Similarity 99.2%; Pred. No. 0.039;
Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy      1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCTTGAGAGTCAACGCGCCCACTACTGATGATGACTTCTGCGGGGCTCCCTCATC 120
Db      61 CAGGTGAGCTTGAGAGTCAACGCGCCCACTACTGATGATGACTTCTGCGGGGCTCCCTCATC 120
Qy      121 CACCCCCAGTGGGTGTGACCGCGCGGGCGTGGTGGACCGGACGTCAAGATCTGGCC 180
Db      121 CACCCCCAGTGGGTGTGACCGCGCGGGCGTGGTGGACCGGACGTCAAGATCTGGCC 180
Qy      181 GGCCTCAGGGTGAACGTGGGGGAGACGACTCTAACAAGACCAAGCTGTGCGGGT 240
Db      181 GGCCTCAGGGTGAACGTGGGGGAGACGACTCTAACAAGACCAAGCTGTGCGGGT 240
Qy      241 AGCAGATATATCTGTGCAACCAAGTTCTACACGCGCCCAAGATCGGAGCGGACATGCGCTG 300
Db      241 AGCAGATATATCTGTGCAACCAAGTTCTACACGCGCCCAAGATCGGAGCGGACATGCGCTG 300
Qy      301 CTGAGAGCTGAGAGAGCGGAGTGAAGTGTCAAGCAAGTCAACGCTGACCTGGCCCT 360
Db      301 CTGAGAGCTGAGAGAGCGGAGTGAAGTGTCAAGCAAGTCAACGCTGACCTGGCCCT 360
Qy      361 GGCCTCAGAGACTTCCCGCGGGGAGTGCCTGCTGGGTCACTGGCTGGGGGAGTGGAC 420
Db      361 GGCCTCAGAGACTTCCCGCGGGGAGTGCCTGCTGGGTCACTGGCTGGGGGAGTGGAC 420
Qy      421 AATGATGAGGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGAA 480
Db      421 AATGATGAGGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGAA 480
Qy      481 AACCACTTTGTGACGCAAAATACCACTTTGGCGCTTACAGGGAGACAGCTCCGCATC 540
Db      481 AACCACTTTGTGACGCAAAATACCACTTTGGCGCTTACAGGGAGACAGCTCCGCATC 540
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Db      481 AACCACTTTGTGACGCAAAATACCACTTTGGCGCTTACAGGGAGACAGCTCCGCATC 540
Qy      541 GTCCGTGACGACATGCTGTGTGTCGGGAAACACCCGAGGAACTATGACAGGCGACATCC 600
Db      541 GTCCGTGACGACATGCTGTGTGTCGGGAAACACCCGAGGAACTATGACAGGCGACATCC 600
Qy      601 GAGAGGCCCTGTGTGTGCAAGGTGAATGCACTTGGCTGCAAGCGGCGGTGTGACCTGG 660
Db      601 GAGAGGCCCTGTGTGTGCAAGGTGAATGCACTTGGCTGCAAGCGGCGGTGTGACCTGG 660
Qy      661 GCGAGGGCTGTGTGCTCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTGG 720
Db      661 GCGAGGGCTGTGTGCTCCAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTGG 720
Qy      721 GACTGATCCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGGTGT 771
Db      721 GACTGATCCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGGTGT 771
```

```
RESULT 5
US-09-598-982C-22
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

Query Match      98.5%; Score 759.8; DB 1; Length 771;
Best local Similarity 99.1%; Pred. No. 0.04;
Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy      1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCTTGAGAGTCAACGCGCCCACTACTGATGATGACTTCTGCGGGGCTCCCTCATC 120
Db      61 CAGGTGAGCTTGAGAGTCAACGCGCCCACTACTGATGATGACTTCTGCGGGGCTCCCTCATC 120
Qy      121 CACCCCCAGTGGGTGTGACCGCGCGGGCGTGGTGGACCGGACGTCAAGATCTGGCC 180
Db      121 CACCCCCAGTGGGTGTGACCGCGCGGGCGTGGTGGACCGGACGTCAAGATCTGGCC 180
Qy      181 GGCCTCAGGGTGAACGTGGGGGAGACGACTCTAACAAGACCAAGCTGTGCGGGT 240
Db      181 GGCCTCAGGGTGAACGTGGGGGAGACGACTCTAACAAGACCAAGCTGTGCGGGT 240
Qy      241 AGCAGATATATCTGTGCAACCAAGTTCTACACGCGCCCAAGATCGGAGCGGACATGCGCTG 300
Db      241 AGCAGATATATCTGTGCAACCAAGTTCTACACGCGCCCAAGATCGGAGCGGACATGCGCTG 300
Qy      301 CTGAGAGCTGAGAGAGCGGAGTGAAGTGTCTCAAGCAGTCAACGCTGACCTGGCCCT 360
Db      301 CTGAGAGCTGAGAGAGCGGAGTGAAGTGTCTCAAGCAGTCAACGCTGACCTGGCCCT 360
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Qy 361 GCCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGCGTGGCGCATGTGGAC 420
Db 361 GCCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGCGTGGCGCATGTGGAC 420
Qy 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAAGAGGTGAAGGTCTCCCATTAATGAA 480
Db 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAAGAGGTGAAGGTCTCCCATTAATGAA 480
Qy 481 AACCACTTTGTGACGAAAAATACCACTTGGCGGCTTCAACGAGGAGACAGAGTCCGATC 540
Db 481 AACCACTTTGTGACGAAAAATACCACTTGGCGGCTTCAACGAGGAGACAGAGTCCGATC 540
Qy 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGGAGTCACTATCGACGGGCACTCC 600
Db 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGGAGTCACTATCGACGGGCACTCC 600
Qy 601 GGAAGGCGCTGTGTGTCAGAGTGAATGGACCTGGCTGACAGGCGGCGTGTGACGCTGG 660
Db 601 GGAAGGCGCTGTGTGTCAGAGTGAATGGACCTGGCTGACAGGCGGCGTGTGACGCTGG 660
Qy 661 GGCAGAGGCTGTGTGCGGACCCCAACCGGCTTGGCATTTACACCGGTCACCTACTACTTG 720
Db 661 GGCAGAGGCTGTGTGCGGACCCCAACCGGCTTGGCATTTACACCGGTCACCTACTACTTG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771

```

## RESULT 6

US-09-598-982C-40  
Sequence 40, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40

```

Query Match 97.9%; Score 755; DB 1; Length 771;

Best Local Similarity 98.7%; Pred. No. 0.042;

Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

```

Qy 1 GGGCCCTTCAGAAAAAAGATGTCGGGGGTCAAGAGGCGCCCAAGAGCAATGGCCCTGG 60
Db 1 GGGCCCTTCAGAAAAAAGATGTCGGGGGTCAAGAGGCGCCCAAGAGCAATGGCCCTGG 60
Qy 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTTGCGGGGGCTCCCTCATC 120
Db 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTTGCGGGGGCTCCCTCATC 120
Qy 121 CACCCCGAGTGGGTGACGCGCGCGCGTGGGAGACCGGAGCGTCAAGAGTCTGGCC 180
Db 121 CACCCCGAGTGGGTGACGCGCGCGCGTGGGAGACCGGAGCGTCAAGAGTCTGGCC 180
Qy 181 GCGCTCAAGGTGTCAATGCGGAGCAGCACTCTACTTACAGAGCAAGCTGCTCGGTC 240
Db 181 GCGCTCAAGGTGTCAATGCGGAGCAGCACTCTACTTACAGAGCAAGCTGCTCGGTC 240

```

```

Qy 241 AGCAGATCATCGTGCACCCACAGTTCTTACACCGCCGAGATCGGAGGACATGCGCCTG 300
Db 241 AGCAGATCATCGTGCACCCACAGTTCTTACACCGCCGAGATCGGAGGACATGCGCCTG 300
Qy 301 CTGAGGTGAGAGAGCGCGTGAAGGTCTCCAGCCAGTCCACAGTCACTGCGCCCT 360
Db 301 CTGAGGTGAGAGAGCGCGTGAAGGTCTCCAGCCAGTCCACAGTCACTGCGCCCT 360
Qy 361 GCCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGGCTGGGGCGATGTGGAC 420
Db 361 GCCTCAGAGACCTTCCCCCGGGGATGCGGTGCTGAGTCACTGGCTGGGGCGATGTGGAC 420
Qy 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAAGAGGTGAAGGTCTCCCATTAATGAA 480
Db 421 AATGATGAGCGCTCCACCGGCATTTCTCTGAAGAGGTGAAGGTCTCCCATTAATGAA 480
Qy 481 AACCACTTTGTGACGAAAAATACCACTTGGCGGCTTCAACGAGGAGACAGAGTCCGATC 540
Db 481 AACCACTTTGTGACGAAAAATACCACTTGGCGGCTTCAACGAGGAGACAGAGTCCGATC 540
Qy 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGGAGTCACTATCGACGGGCACTCC 600
Db 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGGAGTCACTATCGACGGGCACTCC 600
Qy 601 GGAAGGCGCTGTGTGTCAGAGTGAATGGACCTGGCTGACAGGCGGCGTGTGACGCTGG 660
Db 601 GGAAGGCGCTGTGTGTCAGAGTGAATGGACCTGGCTGACAGGCGGCGTGTGACGCTGG 660
Qy 661 GGCAGAGGCTGTGTGCGGACCCCAACCGGCTTGGCATTTACACCGGTCACCTACTACTTG 720
Db 661 GGCAGAGGCTGTGTGCGGACCCCAACCGGCTTGGCATTTACACCGGTCACCTACTACTTG 720
Qy 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
Db 721 GACTGATCCACCACTATGTCTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771

```

## RESULT 7

US-09-598-982C-42  
Sequence 42, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42

```

Query Match 97.9%; Score 755; DB 1; Length 771;

Best Local Similarity 98.7%; Pred. No. 0.042;

Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

```

Qy 1 GGGCCCTTCAGAAAAAAGATGTCGGGGGTCAAGAGGCGCCCAAGAGCAATGGCCCTGG 60
Db 1 GGGCCCTTCAGAAAAAAGATGTCGGGGGTCAAGAGGCGCCCAAGAGCAATGGCCCTGG 60
Qy 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTTGCGGGGGCTCCCTCATC 120

```

```

Db      61 CAGGTGAGCTGAGATGCCAGGCCCAATGACATTCTGCGGGGGCTCCCTCATC 120
Qy      121 CACCCCAAGTGGGTCTGACCGCCGCGGTGCTGTGGACCGGAGCTCAAGGATCTGGCC 180
Db      121 CACCCCAAGTGGGTCTGACCGCCGCGGTGCTGTGGACCGGAGCTCAAGGATCTGGCC 180
Qy      181 GCCCTCAGGGTGCACCTGCGGGAGCAGCACTTCTAATCAAGACCAAGCTGTGCGGTC 240
Db      181 GCCCTCAGGGTGCACCTGCGGGAGCAGCACTTCTAATCAAGACCAAGCTGTGCGGTC 240
Qy      241 AGCAGGATCATGTGTCACCCCAAGTTCTACACCGGCCAGATGCGGACGCAATGCGGCTG 300
Db      241 AGCAGGATCATGTGTCACCCCAAGTTCTACACCGGCCAGATGCGGACGCAATGCGGCTG 300
Qy      301 CTGAGCTGAGAGACCGGTGAACGTTCTCAGCCCACTGTCACACCGGTACCTTGCCCTT 360
Db      301 CTGAGCTGAGAGACCGGTGAACGTTCTCAGCCCACTGTCACACCGGTACCTTGCCCTT 360
Qy      361 GCTCAGAGACTTTCCTCCCGGGGATGCCGTGCTGCGGTCACTGCTGCGGGCGATGTGAC 420
Db      361 GCTCAGAGACTTTCCTCCCGGGGATGCCGTGCTGCGGTCACTGCTGCGGGCGATGTGAC 420
Qy      421 AATGATGAGCGCTGCCACCGGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGGA 480
Db      421 AATGATGAGCGCTGCCACCGGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGGA 480
Qy      481 AACCAATTTTGTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGACGACCTGCCATC 540
Db      481 AACCAATTTTGTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGACGACCTGCCATC 540
Qy      541 GTCCGTGACGACATCTGTGTGTCGGGAAACACCCGAGAGGAACTCATGCCAGGCGCATTC 600
Db      541 GTCCGTGACGACATCTGTGTGTCGGGAAACACCCGAGAGGAACTCATGCCAGGCGCATTC 600
Qy      601 GGAGGGGCGCTGTGTGAGGAGTGAATGCACTGGCTGCAAGCGGGGTGCTCAGCTGG 660
Db      601 GGAGGGGCGCTGTGTGAGGAGTGAATGCACTGGCTGCAAGCGGGGTGCTCAGCTGG 660
Qy      661 GCGGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCAACCCGTGTCACTACTACTTG 720
Db      661 GCGGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCAACCCGTGTCACTACTACTTG 720
Qy      721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGCT 771
Db      721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGCT 771

```

RESULT 8  
US-09-598-982C-24  
; Sequence 24, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 24  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-24

Query Match 97.7%; Score 753.4; DB 1; Length 771;

```

Best Local Similarity 98.6%; Pred. No. 0.042;
Matches 760; Conservative 0; Mismatches 11; Indels 0; Gaps 0;
Qy      1 GGGCCCCCTCAGAAAAGAAATGCTGCGGGGTGTCAGAGAGGCCCCAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTCAGAAAAGAAATGCTGCGGGGTGTCAGAGAGGCCCCAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCTGAGAGTGCACGGCCCATATCTGATGACCTTCTGCGGGGGCTCCCTCATC 120
Db      61 CAGGTGAGCTGAGAGTGCACGGCCCATATCTGATGACCTTCTGCGGGGGCTCCCTCATC 120
Qy      121 CACCCCAAGTGGGTCTGACCGCCGCGGTGCTGTGGACCGGAGCTCAAGGATCTGGCC 180
Db      121 CACCCCAAGTGGGTCTGACCGCCGCGGTGCTGTGGACCGGAGCTCAAGGATCTGGCC 180
Qy      181 GCCCTCAGGGTGCACCTGCGGGAGCAGCACTTCTAATCAAGACCAAGCTGTGCGGTC 240
Db      181 GCCCTCAGGGTGCACCTGCGGGAGCAGCACTTCTAATCAAGACCAAGCTGTGCGGTC 240
Qy      241 AGCAGGATCATGTGTCACCCCAAGTTCTACACCGGCCAGATGCGGACGCAATGCGGCTG 300
Db      241 AGCAGGATCATGTGTCACCCCAAGTTCTACACCGGCCAGATGCGGACGCAATGCGGCTG 300
Qy      301 CTGAGCTGAGAGACCGGTGAACGTTCTCAGCCCACTGTCACACCGGTACCTTGCCCTT 360
Db      301 CTGAGCTGAGAGACCGGTGAACGTTCTCAGCCCACTGTCACACCGGTACCTTGCCCTT 360
Qy      361 GCTCAGAGACTTTCCTCCCGGGGATGCCGTGCTGCGGTCACTGCTGCGGGCGATGTGAC 420
Db      361 GCTCAGAGACTTTCCTCCCGGGGATGCCGTGCTGCGGTCACTGCTGCGGGCGATGTGAC 420
Qy      421 AATGATGAGCGCTGCCACCGGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGGA 480
Db      421 AATGATGAGCGCTGCCACCGGCATTTCTCTGAAGCAGGTGAAGGTCCCATATGGA 480
Qy      481 AACCAATTTTGTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGACGACCTGCCATC 540
Db      481 AACCAATTTTGTGAGCGCAAAATATACCACTTGGCGCTTACACCGGAGACGACCTGCCATC 540
Qy      541 GTCCGTGACGACATCTGTGTGTCGGGAAACACCCGAGAGGAACTCATGCCAGGCGCATTC 600
Db      541 GTCCGTGACGACATCTGTGTGTCGGGAAACACCCGAGAGGAACTCATGCCAGGCGCATTC 600
Qy      601 GGAGGGGCGCTGTGTGAGGAGTGAATGCACTGGCTGCAAGCGGGGTGCTCAGCTGG 660
Db      601 GGAGGGGCGCTGTGTGAGGAGTGAATGCACTGGCTGCAAGCGGGGTGCTCAGCTGG 660
Qy      661 GCGGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCAACCCGTGTCACTACTACTTG 720
Db      661 GCGGAGGCGTGTGCCAGCCCAACCGGCTGTGACATCAACCCGTGTCACTACTACTTG 720
Qy      721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGCT 771
Db      721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGCT 771

```

RESULT 9  
US-09-598-982C-26  
; Sequence 26, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 26

```

; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

```

Query Match 97.7%; Score 753.4; DB 1; Length 771;

Best Local Similarity 98.6%; Pred. No. 0.042; Mismatches 11; Indels 0; Gaps 0;

Matches 760; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

```

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAATGAGCCCTG 60
D 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAATGAGCCCTG 60
QY 61 CAGGTGAGCTGAGAGTTCACGAGCCCACTGATGCACTTCTGCGGGGCTCCCTCATC 120
D 61 CAGGTGAGCTGAGAGTTCACGAGCCCACTGATGCACTTCTGCGGGGCTCCCTCATC 120
QY 121 CACCCCAAGTGGGTGTCGACCGCGCGCGCTGCGGGGACCGGACGTCAAGATCTGGCC 180
D 121 CACCCCAAGTGGGTGTCGACCGCGCGCGCTGCGGGGACCGGACGTCAAGATCTGGCC 180
QY 181 GCCCTCAGGGTGAACCTGCGGGAGAGCACTCTACTACAGAGCAAGCTGCGCGCTC 240
D 181 GCCCTCAGGGTGAACCTGCGGGAGAGCACTCTACTACAGAGCAAGCTGCGCGCTC 240
QY 241 AGCAGATCATCTGTCACCCACAGTTCTACACGCGCCAGATCGAGCGGACATGCGCTG 300
D 241 AGCAGATCATCTGTCACCCACAGTTCTACACGCGCCAGATCGAGCGGACATGCGCTG 300
QY 301 CTGAGAGTGAAGAGACCGGTGAAGTCTCCAGCCACCTGTCACAGGTCACTCTGCTCC 360
D 301 CTGAGAGTGAAGAGACCGGTGAAGTCTCCAGCCACCTGTCACAGGTCACTCTGCTCC 360
QY 361 GCGTCAGAGACCTTCCCGCGGGAGTGCCTGCTGGGTCACTGGCTGGGGGAGATGAGAC 420
D 361 GCGTCAGAGACCTTCCCGCGGGAGTGCCTGCTGGGTCACTGGCTGGGGGAGATGAGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCACTTCTCTGAAGAGGTGAAGTCCCATATGAA 480
D 421 AATGATGAGCGCTCCCAACCGCACTTCTCTGAAGAGGTGAAGTCCCATATGAA 480
QY 481 AATGATGAGCGCTCCCAACCGCACTTCTCTGAAGAGGTGAAGTCCCATATGAA 540
D 481 AATGATGAGCGCTCCCAACCGCACTTCTCTGAAGAGGTGAAGTCCCATATGAA 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCGGGAGGGACTGATGCAAGGCGACTCC 600
D 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCGGGAGGGACTGATGCAAGGCGACTCC 600
QY 601 GGAAGGCGCTGTGTGTGCAAGGTGATGCACTGCTGCAAGGCGGCTGTGATGCTG 660
D 601 GGAAGGCGCTGTGTGTGCAAGGTGATGCACTGCTGCAAGGCGGCTGTGATGCTG 660
QY 661 GGGAGGAGCTGTGTGCGGAGCCCAACCGGCTGTGATGCACTGCTGCAAGGCTG 720
D 661 GGGAGGAGCTGTGTGCGGAGCCCAACCGGCTGTGATGCACTGCTGCAAGGCTG 720
QY 721 GACTGATGTCACCACTATGTCCTCCAAAAGCGTGAAGCGGCGCGCTGCT 771
D 721 GACTGATGTCACCACTATGTCCTCCAAAAGCGTGAAGCGGCGCGCTGCT 771

```

RESULT 10

US-09-598-982C-10

Sequence 10, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendescho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

```

; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

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Query Match 94.3%; Score 727; DB 1; Length 735;

Best Local Similarity 99.3%; Pred. No. 0.057; Mismatches 5; Indels 0; Gaps 0;

Matches 730; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

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QY 19 ATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGAGAGTGAAGTGC 78
D 1 ATGCTGGGGGTGAGAGGCCCCCAGAGCAAGTGGCCCTGAGAGTGAAGTGC 78
QY 79 CAGGGCCATATCTGAGATGCACTTCTGCGGGGCTCCCTCATCCACCCAGTGGGTGCTG 138
D 79 CAGGGCCATATCTGAGATGCACTTCTGCGGGGCTCCCTCATCCACCCAGTGGGTGCTG 138
QY 139 ACCGCGCGGCTGTGCGGGAGCCGAGCGTCAAGGATCTGCGCGCTCAGGGTCAATG 198
D 139 ACCGCGCGGCTGTGCGGGAGCCGAGCGTCAAGGATCTGCGCGCTCAGGGTCAATG 198
QY 199 CCGGAGAGCACTCTACTACAGAGCAAGTGTGCGCGCTGACAGATTAATGTGAC 258
D 199 CCGGAGAGCACTCTACTACAGAGCAAGTGTGCGCGCTGACAGATTAATGTGAC 258
QY 259 CCGGAGAGCACTCTACTACAGAGCAAGTGTGCGCGCTGACAGATTAATGTGAC 318
D 259 CCGGAGAGCACTCTACTACAGAGCAAGTGTGCGCGCTGACAGATTAATGTGAC 318
QY 319 GTGAGCGTCTCAAGCAAGTTCACAGCGTCAACCTGCGCGCTGAGAGCTTCCCG 378
D 319 GTGAGCGTCTCAAGCAAGTTCACAGCGTCAACCTGCGCGCTGAGAGCTTCCCG 378
QY 379 CCGGAGATGCGGTGTGCTGAGTCACTGCGTGGGCGATGTGACATATGAGCGCTCCCA 438
D 379 CCGGAGATGCGGTGTGCTGAGTCACTGCGTGGGCGATGTGACATATGAGCGCTCCCA 438
QY 439 CCGGAGATGCGGTGTGCTGAGTCACTGCGTGGGCGATGTGACATATGAGCGCTCCCA 498
D 439 CCGGAGATGCGGTGTGCTGAGTCACTGCGTGGGCGATGTGACATATGAGCGCTCCCA 498
QY 499 AATATACCACTTGGCGCTCAACCGGAGAGCAAGTTCGATCGTCCGTGAGCATGCTG 558
D 499 AATATACCACTTGGCGCTCAACCGGAGAGCAAGTTCGATCGTCCGTGAGCATGCTG 558
QY 559 TGTGCGGGAAACACCGGAGGGACTCATGCGAGGCACTTCGAGAGGCGCTGTGTGCT 618
D 559 TGTGCGGGAAACACCGGAGGGACTCATGCGAGGCACTTCGAGAGGCGCTGTGTGCT 618
QY 619 AAGGTGAATGAGCACTGCTGCAAGCGGCGGTGTGACGCTGCGGCGAGAGGCTGTGCCAG 678
D 619 AAGGTGAATGAGCACTGCTGCAAGCGGCGGTGTGACGCTGCGGCGAGAGGCTGTGCCAG 678
QY 679 CCGAAGCGGCTGTGATCTACACCGGTGTGCACTTACTACTTGTGATCTGATCTGAT 738
D 679 CCGAAGCGGCTGTGATCTACACCGGTGTGCACTTACTACTTGTGATCTGATCTGAT 738
QY 739 GTCCCAAAAAGCGG 753
D 739 GTCCCAAAAAGCGG 753

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RESULT 11
US-09-598-982C-20/c
; Sequence 20, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-20

Query Match          4.2%; Score 32.4; DB 1; Length 771;
Best Local Similarity 46.8%; Pred. No. 17;
Matches 102; Conservative 0; Mismatches 116; Indels 0; Gaps 0;

QY 49 AAGTGGCCCTGAGAGAGCTGAGAGTCCAGCGCCCATCTGATGATGATCTTTCGGGG 108
DB 266 AACTGTGGGTGACAGATATCTCTGTGACCGGACACAGCTGTCTCTGTGATGAGGTGC 207
QY 109 GGCTCCCTCATCCACCCCACTGGGTGCTGACCGCGCGGTGGGACCGGACGTC 168
DB 206 TGCTCCCGCATTTGACACCTCTGAGGGCGGCGACATCTTGACGTCGGTCCACGACGCC 147
QY 169 AAGATCTGGCGCCCTCAGGGGTGCACTGCGGAGACGACACTTACTACGAGACGAG 228
DB 146 GCGGGGTGACAGACCCACCTGAGGGGTGATGAGGGAGGCCCGCCAGAGTGCATCCAGTAT 87
QY 229 CTGCTGCCGTGACAGAGATCATCTGTCACCCACGATT 266
DB 86 GGGCGGTGACTCTCAGGCTCAGCTCAGGCGCACTT 49

RESULT 12
US-09-598-982C-36/c
; Sequence 36, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-36

Query Match          4.2%; Score 32.4; DB 1; Length 771;
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```
Best Local Similarity 46.8%; Pred. No. 17;
Matches 102; Conservative 0; Mismatches 116; Indels 0; Gaps 0;

QY 49 AAGTGGCCCTGAGAGAGCTGAGAGTCCAGCGCCCATCTGATGATGATCTTTCGGGG 108
DB 266 AACTGTGGGTGACAGATATCTCTGTGACCGGACACAGCTGTCTCTGTGATGAGGTGC 207
QY 109 GGCTCCCTCATCCACCCCACTGGGTGCTGACCGCGCGGTGGGACCGGACGTC 168
DB 206 TGCTCCCGCATTTGACACCTCTGAGGGCGGCGACATCTTGACGTCGGTCCACGACGCC 147
QY 169 AAGATCTGGCGCCCTCAGGGGTGCACTGCGGAGACGACACTTACTACGAGACGAG 228
DB 146 GCGGGGTGACAGACCCACCTGAGGGGTGATGAGGGAGGCCCGCCAGAGTGCATCCAGTAT 87
QY 229 CTGCTGCCGTGACAGAGATCATCTGTCACCCACGATT 266
DB 86 GGGCGGTGACTCTCAGGCTCAGCTCAGGCGCACTT 49

RESULT 13
US-09-598-982C-8/c
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-8

Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGACAGAGGCCCGCCAGAGCATGAGCCCTGG 60
DB 113 GAGCCCCCGAGAAAGTGCATCAGTATGGGCGGTGACTCTCAGGCTCAGCTCCAGGGC 54
QY 61 CAGGTGACCTGAGAGTCCAGGCGCCCATCTGATGATGATCTTTCGGGGGCTC 113
DB 53 CACTGTCTCTGGGGGCTCTCTGACCCCGACGATCTTCTCTGAGGGGGCC 1

RESULT 14
US-09-598-982C-22/c
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
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; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURES:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-22

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCAGGGC 54
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGACTCTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGGCC 1

RESULT 15
US-09-598-982C-24/c
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURES:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCAGGGC 54
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGACTCTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGGCC 1

RESULT 16
US-09-598-982C-26/c
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
```

```
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURES:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCAGGGC 54
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGACTCTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGGCC 1

RESULT 17
US-09-598-982C-38/c
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURES:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

Query Match      3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCGCCAGAGCAAGTGGCCCTGG 60
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCAGGGC 54
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGACTCTTCTGCGGGGGCTC 113
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATCTTTTCTCGAGGGGGCC 1

RESULT 18
US-09-598-982C-40/c
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
```

```

; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598.982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-40

Query Match
Best Local Similarity 53.1%; Score 28.2; DB 1; Length 771;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCTCGAGAAAGATCGTCGGGGTCAGAGGCCCCCAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGAGAGATGATCCAGTATGGGCGCTGACTCTCAGGCTCACTGCGAGGCG 54

Qy 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATATGATGCACTTCTGGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGAGCAATTTCTTCTCGAGGGGGCC 1

RESULT 19
US-09-598-982C-42/c
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598.982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-42

Query Match
Best Local Similarity 53.1%; Score 28.2; DB 1; Length 771;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCTCGAGAAAGATCGTCGGGGTCAGAGGCCCCCAGAGCAAGTGGCCCTGG 60
Db 113 GAGCCCCCGAGAGATGATCCAGTATGGGCGCTGACTCTCAGGCTCACTGCGAGGCG 54

Qy 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATATGATGCACTTCTGGGGGGCTC 113
Db 53 CACTTGCTCTGGGGGCTCTGACCCCGAGCAATTTCTTCTCGAGGGGGCC 1

RESULT 20
US-09-598-982C-10/c
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
```

```

; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598.982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
; US-09-598-982C-10

Query Match
Best Local Similarity 45.4%; Score 27.6; DB 1; Length 735;
Matches 99; Conservative 0; Mismatches 119; Indels 0; Gaps 0;

Qy 49 AAGTGGCCCTGAGAGTGGAGCTGAGAGTCCAGCGCCCATATGATGCACTTCTGGCGG 108
Db 248 AACTGTGGTCAAGATGATCTCTGACCGGCGAGCACTGCTCTGATGAGGTGC 189

Qy 109 GACTTCCTCATCCACCCCACTGGAGTGCAGCCGCGGCGTGCAGTGGAGCCGAGCTC 168
Db 188 TGCTCCGCAATTCAGACCTGAGGGCGGCGAGATCTTGAAGTCCGATCCAGCAAGTGC 129

Qy 169 AAGATCTGCGCCGCTCAGGAGTGCAGTCCGAGAGCACTTACTACAGAGCAG 228
Db 128 GCTGGGTCAACACCACTGGGGGTGATGAGGAGCCCGCAGAAATGATCCAGTAT 69

Qy 229 CTGTCGCGGTGAGAGGATCATGATGAGCAGCCAGAGTT 266
Db 68 GGGCGGTGACTTCAGGCTCAGCTCAGGCGCACTT 31
```

Search completed: August 26, 2005, 12:32:33  
Job time : 3.81314 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 26, 2005, 12:31:55 ; Search time 2.81314 Seconds  
(without alignments)  
4.206 Million cell updates/sec

Title: US-09-598-982C-38  
Perfect score: 771  
Sequence: 1 gggccctcgagaaagaat.....cftgaagcgccgcgtcgt 771

Scoring table: IDENTITY NUC  
Gapop 10.0, Gapext 0.5

Searched: 10 seqs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	771	100.0	771	1	US-09-598-982C-38
2	769.4	99.8	771	1	US-09-598-982C-22
3	766.2	99.4	771	1	US-09-598-982C-8
4	761.4	98.8	771	1	US-09-598-982C-36
5	759.8	98.5	771	1	US-09-598-982C-20
6	758.2	98.3	771	1	US-09-598-982C-40
7	758.2	98.3	771	1	US-09-598-982C-42
8	756.6	98.1	771	1	US-09-598-982C-24
9	756.6	98.1	771	1	US-09-598-982C-26
10	730.2	94.7	771	1	US-09-598-982C-10
11	28.2	3.7	771	1	US-09-598-982C-8
12	28.2	3.7	771	1	US-09-598-982C-20
13	28.2	3.7	771	1	US-09-598-982C-22
14	28.2	3.7	771	1	US-09-598-982C-24
15	28.2	3.7	771	1	US-09-598-982C-26
16	28.2	3.7	771	1	US-09-598-982C-36
17	28.2	3.7	771	1	US-09-598-982C-38
18	28.2	3.7	771	1	US-09-598-982C-40
19	28.2	3.7	771	1	US-09-598-982C-42
20	22.8	3.0	735	1	US-09-598-982C-10

## ALIGNMENTS

RESULT 1  
US-09-598-982C-38  
Sequence 38, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Matfield, Mark  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 38  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-38

Query Match 100.0%; Score 771; DB 1; Length 771;  
Best Local Similarity 100.0%; Pred. No. 0.037;  
Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGAGCAAGTGGCCCTGG 60  
DB 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGAGCAAGTGGCCCTGG 60  
QY 61 CAGGTGAGCTGAGAGTCCAGGCGCATATCGAGAGCACTTCTGCGGGGGCTCCCTCATC 120  
DB 61 CAGGTGAGCTGAGAGTCCAGGCGCATATCGAGAGCACTTCTGCGGGGGCTCCCTCATC 120  
QY 121 CACCCCAAGTGGTCTGACCGCAGAGCACTGCGTGGAGCGGAGCTGAAGATCTGACC 180

DB 121 CACCCCAAGTGGTCTGACCGCAGAGCACTGCGTGGAGCGGAGCTGAAGATCTGACC 180  
QY 181 GCGCTGAGGGTGAACCTGCGGGAGAGCACTCTACTACAGAGCAAGTCTGCGGTC 240  
DB 181 GCGCTGAGGGTGAACCTGCGGGAGAGCACTCTACTACAGAGCAAGTCTGCGGTC 240  
QY 241 AGCAGATCATCTGTCACCAAGTCTTACACCGCCAGATCGAGCGGCAATCGCCCTG 300  
DB 241 AGCAGATCATCTGTCACCAAGTCTTACACCGCCAGATCGAGCGGCAATCGCCCTG 300  
QY 301 CTGAGAGTGAAGAGCGCGTGAAGCTTCCAGCCAGCTTCAACAGTCACTTCCCTCC 360  
DB 301 CTGAGAGTGAAGAGCGCGTGAAGCTTCCAGCCAGCTTCAACAGTCACTTCCCTCC 360  
QY 361 GCGTCAAGACCTTCCCGGGGATGCGCTGCGGGTCACTGCTGCGGGGAGATGGAC 420  
DB 361 GCGTCAAGACCTTCCCGGGGATGCGCTGCGGGTCACTGCTGCGGGGAGATGGAC 420  
QY 421 AATGATGAGCGCTCCCAAGCTTCTCTGAGAGAGTGAAGTCCCATATGGA 480  
DB 421 AATGATGAGCGCTCCCAAGCTTCTCTGAGAGAGTGAAGTCCCATATGGA 480  
QY 481 AACCAATTGTGACGCAAAATACACCTTGGCGCTTACAGGAGACGAGCTCGCATC 540  
DB 481 AACCAATTGTGACGCAAAATACACCTTGGCGCTTACAGGAGACGAGCTCGCATC 540  
QY 541 GTCCGTGACCAATGCTGTGTGCGGGAGACACCGGAGGAGCTGATCCAGGGGAGCTCC 600  
DB 541 GTCCGTGACCAATGCTGTGTGCGGGAGACACCGGAGGAGCTGATCCAGGGGAGCTCC 600  
QY 601 GAGAGGCGCTGTGTGTCAGATGATGAGCACTGCTGAGCGGGGCTGTGAGCTG 660  
DB 601 GAGAGGCGCTGTGTGTCAGATGATGAGCACTGCTGAGCGGGGCTGTGAGCTG 660  
QY 661 GCGAGGCGCTGTGTCAGCGCCAGCCAGCGGCTTGGAGCTTACACCGGTGACTACTTG 720  
DB 661 GCGAGGCGCTGTGTCAGCGCCAGCCAGCGGCTTGGAGCTTACACCGGTGACTACTTG 720  
QY 721 GACTGATTCACCACTATGTCTCCCAAAAGCGGTGAAGCGGCGCGCTGT 771  
DB 721 GACTGATTCACCACTATGTCTCCCAAAAGCGGTGAAGCGGCGCGCTGT 771

RESULT 2  
US-09-598-982C-22  
Sequence 22, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Matfield, Mark  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 22  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-22

Query Match 99.8%; Score 769.4; DB 1; Length 771;  
Best Local Similarity 99.8%; Pred. No. 0.037;  
Matches 770; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGAGCAAGTGGCCCTGG 60

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Db      1 GGGCCCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCGGAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCTTGAGAGTCCACGCGCCATATGATGCACTTTCGCGGGGCTCCCTCATC 120
Db      61 CAGGTGAGCTTGAGAGTCCACGCGCCATATGATGCACTTTCGCGGGGCTCCCTCATC 120
Qy      121 CACCCCCAGTGGGTCTGACCGGACGCACTGCGTGGGACCGGACGTCAGAGATCTGGCC 180
Db      121 CACCCCCAGTGGGTCTGACCGGACGCACTGCGTGGGACCGGACGTCAGAGATCTGGCC 180
Qy      181 GCGCTCAGGGTGCATCTGGGGGAGCAGCCTCTACTACAGAGACAGCTGCTGCGGATC 240
Db      181 GCGCTCAGGGTGCATCTGGGGGAGCAGCCTCTACTACAGAGACAGCTGCTGCGGATC 240
Qy      241 AGCAGGATCATCTGTCACCCACAGTTCATACCGCGCCAGATGAGCGGCAATCGCCCTG 300
Db      241 AGCAGGATCATCTGTCACCCACAGTTCATACCGCGCCAGATGAGCGGCAATCGCCCTG 300
Qy      301 CTGAGCTGAGAGAGCCGGTGAACGTCTTCACGCAAGTCACACGAGTCACTTGCCTCT 360
Db      301 CTGAGCTGAGAGAGCCGGTGAACGTCTTCACGCAAGTCACACGAGTCACTTGCCTCT 360
Qy      361 GCGCTCAGAGAGCTTCCCGCGGGAGTCCGCTGCTGAGTCACTGCTGGGGGAGATGAGAC 420
Db      361 GCGCTCAGAGAGCTTCCCGCGGGAGTCCGCTGCTGAGTCACTGCTGGGGGAGATGAGAC 420
Qy      421 AATGATGAGCGCTTCCACCGCCATTTCTCTGAAAGAGAGTGAAGTCCCATTAATGAA 480
Db      421 AATGATGAGCGCTTCCACCGCCATTTCTCTGAAAGAGAGTGAAGTCCCATTAATGAA 480
Qy      481 AACCACTTTTGTGAGCGCAAAATACCACTTGGCGCTTACACGGGAGAGAGAGTCCGATC 540
Db      481 AACCACTTTTGTGAGCGCAAAATACCACTTGGCGCTTACACGGGAGAGAGAGTCCGATC 540
Qy      541 GTCGCTGAGAGCATGCTGTGTGCGGGGAAACACCGGAGAGGAACTCAATGCCAGGACATCC 600
Db      541 GTCGCTGAGAGCATGCTGTGTGCGGGGAAACACCGGAGAGGAACTCAATGCCAGGACATCC 600
Qy      601 GAGAGGCCCCCTGTGTGTCAGAGGTGATGCACTGCTGACAGCGGCGGTGTGATGAG 660
Db      601 GAGAGGCCCCCTGTGTGTCAGAGGTGATGCACTGCTGACAGCGGCGGTGTGATGAG 660
Qy      661 GCGGAGGGCTGTGTCAGCGCCCAACCGGCGCTGGCATCTACCCGCTGTCACTACTTGG 720
Db      661 GCGGAGGGCTGTGTCAGCGCCCAACCGGCGCTGGCATCTACCCGCTGTCACTACTTGG 720
Qy      721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCGTGT 771
Db      721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCGTGT 771

RESULT 3
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patencin version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:

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; NAME/KEY: CDS
; LOCATION: (7) .. (753)
US-09-598-982C-8
Query Match          99.4%; Score 766.2; DB 1; Length 771;
Best Local Similarity 99.6%; Pred. No. 0.038;
Matches 768; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      1 GGGCCCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCGGAGAGCAAGTGGCCCTGG 60
Db      1 GGGCCCCCTCGAAGAAAGATCTCGGGGTGACAGAGGCCCGGAGAGCAAGTGGCCCTGG 60
Qy      61 CAGGTGAGCTTGAGAGTCCACGCGCCATATGATGCACTTTCGCGGGGCTCCCTCATC 120
Db      61 CAGGTGAGCTTGAGAGTCCACGCGCCATATGATGCACTTTCGCGGGGCTCCCTCATC 120
Qy      121 CACCCCCAGTGGGTCTGACCGGACGCACTGCGTGGGACCGGACGTCAGAGATCTGGCC 180
Db      121 CACCCCCAGTGGGTCTGACCGGACGCACTGCGTGGGACCGGACGTCAGAGATCTGGCC 180
Qy      181 GCGCTCAGGGTGCATCTGGGGGAGCAGCCTCTACTACAGAGACAGCTGCTGCGGATC 240
Db      181 GCGCTCAGGGTGCATCTGGGGGAGCAGCCTCTACTACAGAGACAGCTGCTGCGGATC 240
Qy      241 AGCAGGATCATCTGTCACCCACAGTTCATACCGCGCCAGATGAGGGGCAATCGCCCTG 300
Db      241 AGCAGGATCATCTGTCACCCACAGTTCATACCGCGCCAGATGAGGGGCAATCGCCCTG 300
Qy      301 CTGAGCTGAGAGAGCCGGTGAACGTCTTCACGCAAGTCACACGAGTCACTTGCCTCT 360
Db      301 CTGAGCTGAGAGAGCCGGTGAACGTCTTCACGCAAGTCACACGAGTCACTTGCCTCT 360
Qy      361 GCGCTCAGAGAGCTTCCCGCGGGAGTCCGCTGCTGAGTCACTGCTGGGGGAGATGAGAC 420
Db      361 GCGCTCAGAGAGCTTCCCGCGGGAGTCCGCTGCTGAGTCACTGCTGGGGGAGATGAGAC 420
Qy      421 AATGATGAGCGCTTCCACCGCCATTTCTCTGAAAGAGAGTGAAGTCCCATTAATGAA 480
Db      421 AATGATGAGCGCTTCCACCGCCATTTCTCTGAAAGAGAGTGAAGTCCCATTAATGAA 480
Qy      481 AACCACTTTTGTGAGCGCAAAATACCACTTGGCGCTTACACGGGAGAGAGAGTCCGATC 540
Db      481 AACCACTTTTGTGAGCGCAAAATACCACTTGGCGCTTACACGGGAGAGAGAGTCCGATC 540
Qy      541 GTCGCTGAGAGCATGCTGTGTGCGGGGAAACACCGGAGAGGAACTCAATGCCAGGACATCC 600
Db      541 GTCGCTGAGAGCATGCTGTGTGCGGGGAAACACCGGAGAGGAACTCAATGCCAGGACATCC 600
Qy      601 GAGAGGCCCCCTGTGTGTCAGAGGTGATGCACTGCTGACAGCGGCGGTGTGATGAG 660
Db      601 GAGAGGCCCCCTGTGTGTCAGAGGTGATGCACTGCTGACAGCGGCGGTGTGATGAG 660
Qy      661 GCGGAGGGCTGTGTCAGCGCCCAACCGGCGCTGGCATCTACCCGCTGTCACTACTTGG 720
Db      661 GCGGAGGGCTGTGTCAGCGCCCAACCGGCGCTGGCATCTACCCGCTGTCACTACTTGG 720
Qy      721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCGTGT 771
Db      721 GACTGATTCACCACTATGTCCCAAAAAGCGGTGAAGCGCGCGCGTGT 771

RESULT 4
US-09-598-982C-36
; Sequence 36, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21

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; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 36  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 US-09-598-982C-36

Query Match 98.8%; Score 761.4; DB 1; Length 771;  
 Best Local Similarity 99.2%; Pred. No. 0.04;  
 Matches 765; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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QY 1 GGGCCCTCGAAGAAAGATCTGCGGGGTGAGAGAGCCCGGAGAGCAAGTGGCCCTG 60
DB 1 GGGCCCTCGAAGAAAGATCTGCGGGGTGAGAGAGCCCGGAGAGCAAGTGGCCCTG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGAGACCGGAGCACTGGGTGGGACCGGAGCTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTGAGACCGGAGCACTGGGTGGGACCGGAGCTCAAGATCTGGCC 180
QY 181 GCCCTCAGAGGTGCACTGCGGAGACAGCACTCTACTACAGAGCAGCTGCTCGGATC 240
DB 181 GCCCTCAGAGGTGCACTGCGGAGAGAGCACTCTACTACAGAGCAGCTGCTCGGATC 240
QY 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGCGGCATGCGCTG 300
DB 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGCGGCATGCGCTG 300
QY 301 CTGAGAGCTGAGAGAGCGGTGAAGCTCTCAGCCAGCTGCAAGGTCACCGTCCCTG 360
DB 301 CTGAGAGCTGAGAGAGCGGTGAAGCTCTCAGCCAGCTGCAAGGTCACCGTCCCTG 360
QY 361 GCGTCAGAGACCTTCCCGCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420
DB 361 GCGTCAGAGACCTTCCCGCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420
QY 421 AATGATAGGCGCTCCACCGGCATTTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
DB 421 AATGATAGGCGCTCCACCGGCATTTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
QY 481 AACCAATTTGTAGAGCAAAATACCACTTGGCGCTTACAGGGAGAGAGATCCGATC 540
DB 481 AACCAATTTGTAGAGCAAAATACCACTTGGCGCTTACAGGGAGAGAGATCCGATC 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAGACCGCGAGGAGACTATGCGAGGGGATCC 600
DB 541 GTCCGTGACGACATGCTGTGTGCGGGAGACCGCGAGGAGACTATGCGAGGGGATCC 600
QY 601 GAGAGGCGCCCTGTGTGTGAGGTGAATGACCTTGGCTGAGGCGGGGTGTGAGCTGG 660
DB 601 GAGAGGCGCCCTGTGTGTGAGGTGAATGACCTTGGCTGAGGCGGGGTGTGAGCTGG 660
QY 661 GCGAGAGGCTGTGTGCGGAGCCCAACCGGCTTGAACCTTGAACCTTGAACCTTGA 720
DB 661 GCGAGAGGCTGTGTGCGGAGCCCAACCGGCTTGAACCTTGAACCTTGAACCTTGA 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771

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RESULT 5  
 US-09-598-982C-20  
 ; Sequence 20, Application US/09598982C

; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendescho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 20  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 US-09-598-982C-20

Query Match 98.5%; Score 759.8; DB 1; Length 771;  
 Best Local Similarity 99.1%; Pred. No. 0.041;  
 Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

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QY 1 GGGCCCTCGAAGAAAGATCTGCGGGGTGAGAGAGCCCGGAGAGCAAGTGGCCCTG 60
DB 1 GGGCCCTCGAAGAAAGATCTGCGGGGTGAGAGAGCCCGGAGAGCAAGTGGCCCTG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGAGACCGGAGCACTGGGTGGGACCGGAGCTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTGAGACCGGAGCACTGGGTGGGACCGGAGCTCAAGATCTGGCC 180
QY 181 GCCCTCAGAGGTGCACTGCGGAGACAGCACTCTACTACAGAGCAGCTGCTCGGATC 240
DB 181 GCCCTCAGAGGTGCACTGCGGAGACAGCACTCTACTACAGAGCAGCTGCTCGGATC 240
QY 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGCGGCATGCGCTG 300
DB 241 AGCAGATCATCTGTCACCCCAAGTTCTACACCGCCAGATCGAGCGGCATGCGCTG 300
QY 301 CTGAGAGCTGAGAGAGCGGTGAAGCTCTCAGCCAGCTGCAAGGTCACCGTCCCTG 360
DB 301 CTGAGAGCTGAGAGAGCGGTGAAGCTCTCAGCCAGCTGCAAGGTCACCGTCCCTG 360
QY 361 GCGTCAGAGACCTTCCCGCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420
DB 361 GCGTCAGAGACCTTCCCGCGGGAGTCCGTGCTGGGTCACTGGCTGGGGGAGATGGAC 420
QY 421 AATGATAGGCGCTCCACCGGCATTTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
DB 421 AATGATAGGCGCTCCACCGGCATTTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
QY 481 AACCAATTTGTAGAGCAAAATACCACTTGGCGCTTACAGGGAGAGAGATCCGATC 540
DB 481 AACCAATTTGTAGAGCAAAATACCACTTGGCGCTTACAGGGAGAGAGATCCGATC 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAGACCGCGAGGAGACTATGCGAGGGGATCC 600
DB 541 GTCCGTGACGACATGCTGTGTGCGGGAGACCGCGAGGAGACTATGCGAGGGGATCC 600
QY 601 GAGAGGCGCCCTGTGTGTGAGGTGAATGACCTTGGCTGAGGCGGGGTGTGAGCTGG 660
DB 601 GAGAGGCGCCCTGTGTGTGAGGTGAATGACCTTGGCTGAGGCGGGGTGTGAGCTGG 660
QY 661 GCGAGAGGCTGTGTGCGGAGCCCAACCGGCTTGAACCTTGAACCTTGAACCTTGA 720
DB 661 GCGAGAGGCTGTGTGCGGAGCCCAACCGGCTTGAACCTTGAACCTTGAACCTTGA 720

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QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGTCTGT 771  
 DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGTCTGT 771

RESULT 6  
 US-09-598-982C-40

/ Sequence 40, Application US/09598982C

/ GENERAL INFORMATION:

/ APPLICANT: Niles, Andrew

/ APPLICANT: Maffitt, Mark

/ APPLICANT: Haak-Frendscho, Mary

/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

/ FILE REFERENCE: 34506.104

/ CURRENT APPLICATION NUMBER: US/09/598,982C

/ PRIOR FILING DATE: 2000-06-21

/ PRIOR APPLICATION NUMBER: 09/079,970

/ NUMBER OF SEQ ID NOS: 52

/ SOFTWARE: PatentIn version 3.3

/ SEQ ID NO 40

/ LENGTH: 771

/ TYPE: DNA

/ ORGANISM: Homo sapiens

/ FEATURE:

/ NAME/KEY: CDS

/ LOCATION: (7)..(753)

US-09-598-982C-40

Query Match 98.3%; Score 758.2; DB 1; Length 771;  
 Best Local Similarity 99.0%; Pred. No. 0.041;  
 Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAAGAAAAGATGTCGCGGGGTCAAGAGGCCGCCAGAGCAAGTGGCCCTGG 60  
 DB 1 GGGCCCCCTCGAAGAAAAGATGTCGCGGGGTCAAGAGGCCGCCAGAGCAAGTGGCCCTGG 60  
 QY 61 CAGGTGAGCCTGAGAGTCCACGCGCCATATGATGATGCACTTTCGCGGGGCTCCCTCATC 120  
 DB 61 CAGGTGAGCCTGAGAGTCCACGCGCCATATGATGATGCACTTTCGCGGGGCTCCCTCATC 120  
 QY 121 CACCCCCAGTGGGTGTGACCCGAGGCACTGCTGGAGCCGAGAGTCAAGATCTGGCC 180  
 DB 121 CACCCCCAGTGGGTGTGACCCGAGGCACTGCTGGAGCCGAGAGTCAAGATCTGGCC 180  
 QY 181 GGCCTCAGGGTGCATCTGGGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGGTC 240  
 DB 181 GGCCTCAGGGTGCATCTGGGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGGTC 240  
 QY 241 AGCAGGATCATCTGTGACCCACAGTTCTTACACCGCCAGATGAGAGCGGCAATCGCCCTG 300  
 DB 241 AGCAGGATCATCTGTGACCCACAGTTCTTACACCGCCAGATGAGAGCGGCAATCGCCCTG 300  
 QY 301 CTGAGCTGAGAGAGCGGGTGAAGCTCTCAGCCAGCTTCACACCGGTCACTGCCCCCT 360  
 DB 301 CTGAGCTGAGAGAGCGGGTGAAGCTCTCAGCCAGCTTCACACCGGTCACTGCCCCCT 360  
 QY 361 GCGTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGGCGGAGATGTGAC 420  
 DB 361 GCGTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGGCGGAGATGTGAC 420  
 QY 421 AATGATGAGCGCTCCCAACGCAATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480  
 DB 421 AATGATGAGCGCTCCCAACGCAATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480  
 QY 481 AACCAATTGTTGAGCGCAAAATACCACTTGGCGCTTACAGCGAGACGACGTCCGCATC 540  
 DB 481 AACCAATTGTTGAGCGCAAAATACCACTTGGCGCTTACAGCGAGACGACGTCCGCATC 540  
 QY 541 GTCCGTGAGCAATGTGTGTGCGGGGAGCAACCCGAGAGGATCTCATGCGAGGCGCATCC 600  
 DB 541 GTCCGTGAGCAATGTGTGTGCGGGGAGCAACCCGAGAGGATCTCATGCGAGGCGCATCC 600

DB 541 GTCCGTGAGCAATGTGTGTGCGGGGAGCAACCCGAGAGGATCTCATGCGAGGCGCATCC 600  
 QY 601 GGAAGGCCCTGTGTGTGCAAGGTGAATGCACTGGCTGAGCGGGGTGTGTGAGCTGG 660  
 DB 601 GGAAGGCCCTGTGTGTGCAAGGTGAATGCACTGGCTGAGCGGGGTGTGTGAGCTGG 660  
 QY 661 GCGGAGGCTGTGCGCCAGCCCAACCGGCTGGCATCTACACCGGTGTGACTACTG 720  
 DB 661 GCGGAGGCTGTGCGCCAGCCCAACCGGCTGGCATCTACACCGGTGTGACTACTG 720  
 QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGTCTGT 771  
 DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGCGCGTCTGT 771

RESULT 7  
 US-09-598-982C-42

/ Sequence 42, Application US/09598982C

/ GENERAL INFORMATION:

/ APPLICANT: Niles, Andrew

/ APPLICANT: Maffitt, Mark

/ APPLICANT: Haak-Frendscho, Mary

/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

/ FILE REFERENCE: 34506.104

/ CURRENT APPLICATION NUMBER: US/09/598,982C

/ PRIOR FILING DATE: 2000-06-21

/ PRIOR APPLICATION NUMBER: 09/079,970

/ PRIOR FILING DATE: 1998-04-15

/ NUMBER OF SEQ ID NOS: 52

/ SOFTWARE: PatentIn version 3.3

/ SEQ ID NO 42

/ LENGTH: 771

/ TYPE: DNA

/ ORGANISM: Homo sapiens

/ FEATURE:

/ NAME/KEY: CDS

/ LOCATION: (7)..(753)

US-09-598-982C-42

Query Match 98.3%; Score 758.2; DB 1; Length 771;  
 Best Local Similarity 99.0%; Pred. No. 0.041;  
 Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAAGAAAAGATGTCGCGGGGTCAAGAGGCCGCCAGAGCAAGTGGCCCTGG 60  
 DB 1 GGGCCCCCTCGAAGAAAAGATGTCGCGGGGTCAAGAGGCCGCCAGAGCAAGTGGCCCTGG 60  
 QY 61 CAGGTGAGCCTGAGAGTCCACGCGCCATATGATGATGCACTTTCGCGGGGCTCCCTCATC 120  
 DB 61 CAGGTGAGCCTGAGAGTCCACGCGCCATATGATGATGCACTTTCGCGGGGCTCCCTCATC 120  
 QY 121 CACCCCCAGTGGGTGTGACCCGAGGCACTGCTGGAGCCGAGAGTCAAGATCTGGCC 180  
 DB 121 CACCCCCAGTGGGTGTGACCCGAGGCACTGCTGGAGCCGAGAGTCAAGATCTGGCC 180  
 QY 181 GGCCTCAGGGTGCATCTGGGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGGTC 240  
 DB 181 GGCCTCAGGGTGCATCTGGGGAGAGCACTCTACTACAGAGCAAGCTGTGCGGGTC 240  
 QY 241 AGCAGGATCATCTGTGACCCACAGTTCTTACACCGCCAGATGAGAGCGGCAATCGCCCTG 300  
 DB 241 AGCAGGATCATCTGTGACCCACAGTTCTTACACCGCCAGATGAGAGCGGCAATCGCCCTG 300  
 QY 301 CTGAGCTGAGAGAGCGGGTGAAGCTCTCAGCCAGCTTCACACCGGTCACTGCCCCCT 360  
 DB 301 CTGAGCTGAGAGAGCGGGTGAAGCTCTCAGCCAGCTTCACACCGGTCACTGCCCCCT 360  
 QY 361 GCGTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGGCGGAGATGTGAC 420  
 DB 361 GCGTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGGCGGAGATGTGAC 420  
 QY 421 AATGATGAGCGCTCCCAACGCAATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480  
 DB 421 AATGATGAGCGCTCCCAACGCAATTTCTCTGAAGCAGGTGAAGGTCCCAATAATGAA 480

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Db      421 AATGATAGAGGCGCTCCACCGCATTTCTCTGAGAGAGGTAGTCCCATATGAA 480
Qy      481 AACCAATTGTGTGACGAAATACCACTTGGCGCTTACAGGAGACGAGTCCGATC 540
Db      481 AACCAATTGTGTGACGAAATACCACTTGGCGCTTACAGGAGACGAGTCCGATC 540
Qy      541 GTCCGTGACGACATGCTGTGTGCGGAGAACCCGAGAGACTATGCTCAAGAGAGAGCC 600
Db      541 GTCCGTGACGACATGCTGTGTGCGGAGAACCCGAGAGACTATGCTCAAGAGAGAGCC 600
Qy      601 GAGAGGCGCTGTGTGTGCAAGGTGAATGACCTGTGCTGACAGCGCGGTGTGAGCTGG 660
Db      601 GAGAGGCGCTGTGTGTGCAAGGTGAATGACCTGTGCTGACAGCGCGGTGTGAGCTGG 660
Qy      661 GCGAGGCGCTGTGTGCTGACAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTG 720
Db      661 GCGAGGCGCTGTGTGCTGACAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTG 720
Qy      721 GACTGATTCACCACTATGTCTCCCAAAAGCCGTGAAGCGGCGCGCTGTGT 771
Db      721 GACTGATTCACCACTATGTCTCCCAAAAGCCGTGAAGCGGCGCGCTGTGT 771

```

RESULT 8  
US-09-598-982C-24  
Sequence 24, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-24

```

Query Match 98.1%; Score 756.6; DB 1; Length 771;

Best Local Similarity 98.8%; Pred. No. 0.042; Matches 762; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

```

Qy      1 GGGGCCCTTCAGAAAAGAAATGTCGGGGGTTCAGAGAGGCCCCCAGAGCAAGTGGCCCTTG 60
Db      1 GGGGCCCTTCAGAAAAGAAATGTCGGGGGTTCAGAGAGGCCCCCAGAGCAAGTGGCCCTTG 60
Qy      61 CAGGTGAGCTTGAGAGTTCACGGCCCACTGATGACATTTCTGCGGGGCTTCCTCATC 120
Db      61 CAGGTGAGCTTGAGAGTTCACGGCCCACTGATGACATTTCTGCGGGGCTTCCTCATC 120
Qy      121 CACCCCAAGTGGGTGCTGACCGGAGCGCATCTGCTGGGACCGGACGTCAAGAAATCTGGCC 180
Db      121 CACCCCAAGTGGGTGCTGACCGGAGCGCATCTGCTGGGACCGGACGTCAAGAAATCTGGCC 180
Qy      181 GCGCTCAGGGGTGAACATGCGGAGAGAGACCTCTACTACAGAGCAAGCTGTCTGCGGTC 240
Db      181 GCGCTCAGGGGTGAACATGCGGAGAGAGACCTCTACTACAGAGCAAGCTGTCTGCGGTC 240
Qy      241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGCAATCGCCCTG 300
Db      241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGCAATCGCCCTG 300

```

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Qy      301 CTGAGCTGAGAGAGCGGTGAAGTCTCTCCAGCACAAGTCAACGTCACCTTGGCCCT 360
Db      301 CTGAGCTGAGAGAGCGGTGAAGTCTCTCCAGCACAAGTCAACGTCACCTTGGCCCT 360
Qy      361 GCCTCAGAGACCTTCCCCCGGGAGATGCGTGTGCTGATCTGCTGGGGGATGTGAC 420
Db      361 GCCTCAGAGACCTTCCCCCGGGAGATGCGTGTGCTGATCTGCTGGGGGATGTGAC 420
Qy      421 AATGATAGAGGCTCTCCACCGCCATTTCTCTGAAGAGAGTGAAGTCCCATTAATGAA 480
Db      421 AATGATAGAGGCTCTCCACCGCCATTTCTCTGAAGAGAGTGAAGTCCCATTAATGAA 480
Qy      481 AACCAATTGTGTGACGAAATACCACTTGGCGCTTACAGGAGAGACGAGTCCGATC 540
Db      481 AACCAATTGTGTGACGAAATACCACTTGGCGCTTACAGGAGAGACGAGTCCGATC 540
Qy      541 GTCCGTGACGACATGCTGTGTGCGGAGAACCCGAGAGGACTATGATCCAGGGGACTTC 600
Db      541 GTCCGTGACGACATGCTGTGTGCGGAGAACCCGAGAGGACTATGATCCAGGGGACTTC 600
Qy      601 GAGAGGCGCTGTGTGTGCAAGGTGAATGACCTGTGCTGACAGCGCGGTGTGAGCTGG 660
Db      601 GAGAGGCGCTGTGTGTGCAAGGTGAATGACCTGTGCTGACAGCGCGGTGTGAGCTGG 660
Qy      661 GCGAGGCGCTGTGTGCTGACAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTG 720
Db      661 GCGAGGCGCTGTGTGCTGACAGCCCAACCGGCTGTGATCTACACCGGTGTCACTACTTG 720
Qy      721 GACTGATTCACCACTATGTCTCCCAAAAGCCGTGAAGCGGCGCGCTGTGT 771
Db      721 GACTGATTCACCACTATGTCTCCCAAAAGCCGTGAAGCGGCGCGCTGTGT 771

```

RESULT 9  
US-09-598-982C-26  
Sequence 26, Application US/09598982C

```

; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26

```

Query Match 98.1%; Score 756.6; DB 1; Length 771;

Best Local Similarity 98.8%; Pred. No. 0.042; Matches 762; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

```

Qy      1 GGGGCCCTTCAGAAAAGAAATGTCGGGGGTTCAGAGAGGCCCCCAGAGCAAGTGGCCCTTG 60
Db      1 GGGGCCCTTCAGAAAAGAAATGTCGGGGGTTCAGAGAGGCCCCCAGAGCAAGTGGCCCTTG 60
Qy      61 CAGGTGAGCTTGAGAGTTCACGGCCCACTGATGACATTTCTGCGGGGCTTCCTCATC 120
Db      61 CAGGTGAGCTTGAGAGTTCACGGCCCACTGATGACATTTCTGCGGGGCTTCCTCATC 120
Qy      121 CACCCCAAGTGGGTGCTGACCGGAGCGCATCTGCTGGGACCGGACGTCAAGAAATCTGGCC 180
Db      121 CACCCCAAGTGGGTGCTGACCGGAGCGCATCTGCTGGGACCGGACGTCAAGAAATCTGGCC 180

```



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QY 181 GCCCTCAGGGTGCACATGCGGAGAGACCTCTAACAAGACCAAGCTGTCGGTTC 240
DB 181 GCCCTCAGGGTGCACATGCGGAGAGACCTCTAACAAGACCAAGCTGTCGGTTC 240
QY 241 AGCAGATCATGTCGACCCACAGTTCTACACCGCCAGANTGAGAGCGGCAATGCCCTG 300
DB 241 AGCAGATCATGTCGACCCACAGTTCTACACCGCCAGANTGAGAGCGGCAATGCCCTG 300
QY 301 CTGAGAGTCGAGAGAGCGGGTGAACGCTTCACGCAAGTCACAGGATCAAGCTGACCCCT 360
DB 301 CTGAGAGTCGAGAGAGCGGGTGAACGCTTCACGCAAGTCACAGGATCAAGCTGACCCCT 360
QY 361 GCGTCAGAGACCTTCCCTCCCGGAGATGCCGTGCTGAGTCACTGAGTGGAGCGATGAGAC 420
DB 361 GCGTCAGAGACCTTCCCTCCCGGAGATGCCGTGCTGAGTCACTGAGTGGAGCGATGAGAC 420
QY 421 AATGATGAGCGCTCTCCACCGCCATTTCTCTGAAAGCAGAGTAAAGTCCCAATATGAA 480
DB 421 AATGATGAGCGCTCTCCACCGCCATTTCTCTGAAAGCAGAGTAAAGTCCCAATATGAA 480
QY 481 AACCAATTGTCAGCAAAATATACCACTTGGCGCTACACGAGAGACGACGTCGCAATC 540
DB 481 AACCAATTGTCAGCAAAATATACCACTTGGCGCTACACGAGAGACGACGTCGCAATC 540
QY 541 GTCCGTGACGACATCTGTGTGCCGGGAAACACCGAGAGGACTCATGCGAGGCGCATCC 600
DB 541 GTCCGTGACGACATCTGTGTGCCGGGAAACACCGAGAGGACTCATGCGAGGCGCATCC 600
QY 601 GAGAGGCGCTGTGTGTGCAAGTGAATGGCACTTGGCTGACAGCGGGGTGTGACGCTGG 660
DB 601 GAGAGGCGCTGTGTGTGCAAGTGAATGGCACTTGGCTGACAGCGGGGTGTGACGCTGG 660
QY 661 GCGAGAGGCTGTGTGCCAGCCCAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
DB 661 GCGAGAGGCTGTGTGCCAGCCCAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
QY 721 GACTGATTCACACTATGTTCCTCCAAAACCGGTGAAGCGGCGCGGTGT 771
DB 721 GACTGATTCACACTATGTTCCTCCAAAACCGGTGAAGCGGCGCGGTGT 771

```

```

RESULT 10
US-09-982C-10
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafelt, Mark
; APPLICANT: Haak-Frendsch, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10

```

```

Query Match          94.7%; Score 730.2; DB 1; Length 735;
Best Local Similarity 99.6%; Pred. No. 0.057;
Matches 732; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 19 ATGCTCGGGGTCAAGAGGCGCCCAAGAGACGAGTGGCCCTTGGAGGTGAGCTGAGAGTC 78
|||||

```

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DB 1 ATGCTCGGGGTCAAGAGGCGCCCAAGAGACGAGTGGCCCTTGGAGGTGAGAGTC 60
QY 79 CACGAGCCATATGATGATGACCTTCTGCGGGGCTCCCTCATCAACCCCAAGTGGTGTG 138
DB 61 CACGAGCCATATGATGATGACCTTCTGCGGGGCTCCCTCATCAACCCCAAGTGGTGTG 120
QY 139 ACCGAGCGCACTGCTGTGGGACCGGACGTCAGAGATCTGCGCCCTTCAAGGTGCAATTG 198
DB 121 ACCGAGCGCACTGCTGTGGGACCGGACGTCAGAGATCTGCGCCCTTCAAGGTGCAATTG 180
QY 199 GGGAGAGCAGCACTCTACTATACAGGACCAAGCTGCTGCGGTCAGAGGATCATGTCGAC 258
DB 181 GGGAGAGCAGCACTCTACTATACAGGACCAAGCTGCTGCGGTCAGAGGATCATGTCGAC 240
QY 259 CCACAGTTCTACACCGCCAGATGAGAGCGGCAATGCCCTGCTGAGACTGAGAGGCG 318
DB 241 CCAAGTTCTACACCGCCAGATGAGAGCGGCAATGCCCTGCTGAGACTGAGAGGCG 300
QY 319 GTGAAGTCTCAGGCAAGTCACACGCTGACCTGCCCCCTGCTCAGAGACCTTCCCG 378
DB 301 GTGAAGTCTCAGGCAAGTCACACGCTGACCTGCCCCCTGCTCAGAGACCTTCCCG 360
QY 379 CCGGGGATGCGGTGCTGGGTCACTGAGTGGGCGATGTCGACCAATGATGAGCGCTCCCA 438
DB 361 CCGGGGATGCGGTGCTGGGTCACTGAGTGGGCGATGTCGACCAATGATGAGCGCTCCCA 420
QY 439 CCGCCATTTCTCTGAAACAGATGAAAGTCCCAATATGAAACCAATTTGTGACGCA 498
DB 421 CCGCCATTTCTCTGAAACAGATGAAAGTCCCAATATGAAACCAATTTGTGACGCA 480
QY 499 AATATCAACCTTGGGCTCTACACGAGGAGACGACGTCGCGCATCTGTCGTCGAGACATGCTG 558
DB 481 AATATCAACCTTGGGCTCTACACGAGGAGACGACGTCGCGCATCTGTCGTCGAGACATGCTG 540
QY 559 TGTGCGGGGAAACACCGGAGGAGACTCATGCCAGGGCGACTCGGAGGAGCCCTGGTGTG 618
DB 541 TGTGCGGGGAAACACCGGAGGAGACTCATGCCAGGGCGACTCGGAGGAGCCCTGGTGTG 600
QY 619 AAGTGAATGAGCACTGTGCTGACAGCGGCGTGTGACGTCGAGCGGAGGCGTGTGCCAG 678
DB 601 AAGTGAATGAGCACTGTGCTGACAGCGGCGGCGTGTGACGTCGAGCGGAGGCGTGTGCCAG 660
QY 679 CCACACGGGCTGTGATCTACACCGGTGTCACTACTTGTGATGATCAACCATAT 738
DB 661 CCACACGGGCTGTGATCTACACCGGTGTCACTACTTGTGATGATCAACCATAT 720
QY 739 GTCCCAAAAAGCGG 753
DB 721 GTCCCAAAAAGCGG 735

```

```

RESULT 11
US-09-598-982C-8/C
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafelt, Mark
; APPLICANT: Haak-Frendsch, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS

```

LOCATION: (7)..(753)  
US-09-598-982C-8

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGGCTC 113  
DB 53 CACTTGCTCTCGGGGGCTCTGACCCCGACGATTTCTTTCTGAGAGGGGCC 1

RESULT 12  
US-09-598-982C-20/c  
Sequence 20, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffett, Mark

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 20

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-20

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGGCTC 113  
DB 53 CACTTGCTCTCGGGGGCTCTGACCCCGACGATTTCTTTCTGAGAGGGGCC 1

RESULT 13  
US-09-598-982C-22/c  
Sequence 22, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffett, Mark

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 22

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-22

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGGCTC 113  
DB 53 CACTTGCTCTCGGGGGCTCTGACCCCGACGATTTCTTTCTGAGAGGGGCC 1

RESULT 14  
US-09-598-982C-24/c  
Sequence 24, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffett, Mark

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 24

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-24

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGTATGGCCGTGACTCTCAGGCTCACCCTGCCAGGGC 54

QY 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGGCTC 113  
DB 53 CACTTGCTCTCGGGGGCTCTGACCCCGACGATTTCTTTCTGAGAGGGGCC 1

RESULT 15  
US-09-598-982C-26/c  
Sequence 26, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffett, Mark

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

; SEQ ID NO 26  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-26

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATTCAGATGAGCCGTGAGCTCTCAGGCTCAGCCAGGAGGC 54  
 QY 61 CAGGTGAGCCTGAGAGTCCAGGCCCCATATCTGATGCACTTCTGCGGGGGCTC 113  
 DB 53 CACTTGCTCTGGGGGCTCTGAGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

RESULT 16  
 US-09-598-982C-36/C  
 ; Sequence 36, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 36  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-36

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATTCAGATGAGCCGTGAGCTCTCAGGCTCAGCCAGGAGGC 54  
 QY 61 CAGGTGAGCCTGAGAGTCCAGGCCCCATATCTGATGCACTTCTGCGGGGGCTC 113  
 DB 53 CACTTGCTCTGGGGGCTCTGAGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

RESULT 17  
 US-09-598-982C-38/C  
 ; Sequence 38, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970

; SEQ ID NO 26  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-38

; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 38  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-38

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATTCAGATGAGCCGTGAGCTCTCAGGCTCAGCCAGGAGGC 54  
 QY 61 CAGGTGAGCCTGAGAGTCCAGGCCCCATATCTGATGCACTTCTGCGGGGGCTC 113  
 DB 53 CACTTGCTCTGGGGGCTCTGAGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

RESULT 18  
 US-09-598-982C-40/C  
 ; Sequence 40, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 40  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-40

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
 Best Local Similarity 53.1%; Pred. No. 17;  
 Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCCCTGAGAAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
 DB 113 GAGCCCCCGCAGAAAGTGCATTCAGATGAGCCGTGAGCTCTCAGGCTCAGCCAGGAGGC 54  
 QY 61 CAGGTGAGCCTGAGAGTCCAGGCCCCATATCTGATGCACTTCTGCGGGGGCTC 113  
 DB 53 CACTTGCTCTGGGGGCTCTGAGACCCCGACGATTTCTTCTCGAGGGGGCCC 1

RESULT 19  
 US-09-598-982C-42/C  
 ; Sequence 42, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104

; SEQ ID NO 26  
 ; LENGTH: 771  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (7)..(753)  
 ; US-09-598-982C-42



```
/ APPLICANT: Maffitt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE OF INVENTION: AND METHODS OF MAKING SAME
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO: 40
/ LENGTH: 771
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (7)..(753)
/ US-09-598-982C-40
```

Query Match 100.0%; Score 771; DB 1; Length 771;

Best Local Similarity 100.0%; Pred. No. 0.037; Mismatches 0; Indels 0; Gaps 0;

Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCTTGAGATCGACGGCCCATCTGGAATGCACTTGTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAGATCGACGGCCCATCTGGAATGCACTTGTGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTCGTGGAGCCGGAAGTCAAGAGTCTGGCC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTCGTGGAGCCGGAAGTCAAGAGTCTGGCC 180
QY 181 GCCCTCAGGGTCAACTCGGGAGCAGCACTCTACTACAGAGCAAGCTGTGCCGGTC 240
DB 181 GCCCTCAGGGTCAACTCGGGAGCAGCACTCTACTACAGAGCAAGCTGTGCCGGTC 240
QY 241 AGCAGATCATGTGATCGCACCAAGTTCTACCGCCGAGATGGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGATCGCACCAAGTTCTACCGCCGAGATGGAGCGGACATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGCGCGGTGAACGTCTCCAGCCAGTCCACAGCGTCAACCTGCCCCCT 360
DB 301 CTGAGAGCTGAGAGCGCGGTGAACGTCTCCAGCCAGTCCACAGCGTCAACCTGCCCCCT 360
QY 361 GCCTCAGAGACTTCCCTCCCGGGAGTGCCTGTGGGTCACTGGCTGGGGCGATGTGGAC 420
DB 361 GCCTCAGAGACTTCCCTCCCGGGAGTGCCTGTGGGTCACTGGCTGGGGCGATGTGGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGTCCCAATAATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGTCCCAATAATGAA 480
QY 481 AACCAATTGTGAGCAGCAAAATATCACTTGGCGCTTACACGAGAGCAAGCTGCGCATC 540
DB 481 AACCAATTGTGAGCAGCAAAATATCACTTGGCGCTTACACGAGAGCAAGCTGCGCATC 540
QY 541 GTCCGTGACGACATGTGTGTGCGGGAAACCCCGAGGGAATCATGTCAAGCGCAAGCC 600
DB 541 GTCCGTGACGACATGTGTGTGCGGGAAACCCCGAGGGAATCATGTCAAGCGCAAGCC 600
QY 601 GCGGACCTCTGTGTGAGAGGTGAATGGCACTGGCTGACAGCGGCGCTGTGAGCTGG 660
DB 601 GCGGACCTCTGTGTGAGAGGTGAATGGCACTGGCTGACAGCGGCGCTGTGAGCTGG 660
QY 661 GCGGAGGCTGTGTGCGCAGCCAAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
DB 661 GCGGAGGCTGTGTGCGCAGCCAAACCGGCTGGCATCTACACCGTGTCACTACTACTTG 720
QY 721 GACTGATCACCACATATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
DB 721 GACTGATCACCACATATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
```

DB 721 GACTGATCACCACATATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771

RESULT 2

US-09-598-982C-24

Sequence 24, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendscho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,

TITLE OF INVENTION: AND METHODS OF MAKING SAME

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 24

LENGTH: 771

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (7)..(753)

US-09-598-982C-24

Query Match 99.8%; Score 769.4; DB 1; Length 771;

Best Local Similarity 99.9%; Pred. No. 0.037; Mismatches 1; Indels 0; Gaps 0;

Matches 770; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
QY 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCTTGAGATCGACGGCCCATCTGGAATGCACTTGTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAGATCGACGGCCCATCTGGAATGCACTTGTGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTCGTGGAGCCGGAAGTCAAGAGTCTGGCC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCACTCGTGGAGCCGGAAGTCAAGAGTCTGGCC 180
QY 181 GCCCTCAGGGTCAACTCGGGAGCAGCACTCTACTACAGAGCAAGCTGTGCCGGTC 240
DB 181 GCCCTCAGGGTCAACTCGGGAGCAGCACTCTACTACAGAGCAAGCTGTGCCGGTC 240
QY 241 AGCAGATCATGTGATCGCACCAAGTTCTACCGCCGAGATGGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATGTGATCGCACCAAGTTCTACCGCCGAGATGGAGCGGACATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGCGCGGTGAACGTCTCCAGCCAGTCCACAGCGTCAACCTGCCCCCT 360
DB 301 CTGAGAGCTGAGAGCGCGGTGAACGTCTCCAGCCAGTCCACAGCGTCAACCTGCCCCCT 360
QY 361 GCCTCAGAGACTTCCCTCCCGGGAGTGCCTGTGGGTCACTGGCTGGGGCGATGTGGAC 420
DB 361 GCCTCAGAGACTTCCCTCCCGGGAGTGCCTGTGGGTCACTGGCTGGGGCGATGTGGAC 420
QY 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGTCCCAATAATGAA 480
DB 421 AATGATGAGCGCTCCACCGCATTTCTCTGAAGCAGGTGAAGTCCCAATAATGAA 480
QY 481 AACCAATTGTGAGCAGCAAAATATCACTTGGCGCTTACACGAGAGCAAGCTGCGCATC 540
DB 481 AACCAATTGTGAGCAGCAAAATATCACTTGGCGCTTACACGAGAGCAAGCTGCGCATC 540
QY 541 GTCCGTGACGACATGTGTGTGCGGGAAACCCCGAGGGAATCATGTCAAGCGCAAGCC 600
DB 541 GTCCGTGACGACATGTGTGTGCGGGAAACCCCGAGGGAATCATGTCAAGCGCAAGCC 600
```

QY 601 GGCAGACCTCTGTGTGTGCAAGTGAATGGCACTGGCTGCAGGCGGGCTGTGACTGG 660  
Db 601 GGCAGACCTCTGTGTGTGCAAGTGAATGGCACTGGCTGCAGGCGGGCTGTGACTGG 660  
QY 661 GGCAGAGGCTGTGCTCCAGCCCAACCGGCTGTGCACTACACCCGTGTCACTACTCTTG 720  
Db 661 GGCAGAGGCTGTGCTCCAGCCCAACCGGCTGTGCACTACACCCGTGTCACTACTCTTG 720  
QY 721 GACTGATTCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGCTGT 771  
Db 721 GACTGATTCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGCTGT 771

RESULT 3  
US-09-598-982C-42

Sequence 42, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffett, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 42  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-42

Query Match 99.4%; Score 766.2; DB 1; Length 771;

Best Local Similarity 99.6%; Pred. No. 0.038; Mismatches 3; Indels 0; Gaps 0;

Matches 768; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGAAATGCTGCGGGGTCAGAGAGCCCCCAGAGCAATGCGCTTG 60  
Db 1 GGGCCCCCTCGAGAAAAGAAATGCTGCGGGGTCAGAGAGCCCCCAGAGCAATGCGCTTG 60  
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120  
Db 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120  
QY 121 CACCCCGCTGGGTGCTGACCGGAGCGCACTGCGTGGGACCGGAGCTCAAGATTTGGCC 180  
Db 121 CACCCCGCTGGGTGCTGACCGGAGCGCACTGCGTGGGACCGGAGCTCAAGATTTGGCC 180  
QY 181 GCGCTCAGGGTGCACCTGCGGAGCAGACCTCTTACACCGCCAGATCGAGCGGACATCGCCTG 240  
Db 181 GCGCTCAGGGTGCACCTGCGGAGCAGACCTCTTACACCGCCAGATCGAGCGGACATCGCCTG 240  
QY 241 AGCAGGATCATCTGTGCAACCAAGTTCTTACACCGCCAGATCGAGCGGACATCGCCTG 300  
Db 241 AGCAGGATCATCTGTGCAACCAAGTTCTTACACCGCCAGATCGAGCGGACATCGCCTG 300  
QY 301 CTGAGAGCTGAGAGAGCGGCTGAACGTCTCAGCCAGCTTCACAGCTCACTCTGCCCCCT 360  
Db 301 CTGAGAGCTGAGAGAGCGGCTGAACGTCTCAGCCAGCTTCACAGCTCACTCTGCCCCCT 360  
QY 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCACTGCTGGGCGGATGTGAGC 420  
Db 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCACTGCTGGGCGGATGTGAGC 420  
QY 421 AATGATGAGCGCTTCCACCGGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGGA 480  
Db 421 AATGATGAGCGCTTCCACCGGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGGA 480

QY 481 AACCATTTTGTGACGCAAAATACCACTTGGCGCTTACACGGAGACGAGTCCGATC 540  
Db 481 AACCATTTTGTGACGCAAAATACCACTTGGCGCTTACACGGAGACGAGTCCGATC 540  
QY 541 GTCCGTGACGACATCTGTGTGCTCCGAGACACCCGAGGACATATGTCAAGGCGAGCC 600  
Db 541 GTCCGTGACGACATCTGTGTGCTCCGAGACACCCGAGGACATATGTCAAGGCGAGCC 600  
QY 601 GGCAGACCTCTGTGTGTCAGAGTGAATGGCACTGGCTGCAGGCGGGCTGTGACTGG 660  
Db 601 GGCAGACCTCTGTGTGTCAGAGTGAATGGCACTGGCTGCAGGCGGGCTGTGACTGG 660  
QY 661 GGCAGAGGCTGTGCTCCAGCCCAACCGGCTGTGCACTACACCCGTGTCACTACTTG 720  
Db 661 GGCAGAGGCTGTGCTCCAGCCCAACCGGCTGTGCACTACACCCGTGTCACTACTTG 720  
QY 721 GACTGATTCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGCTGT 771  
Db 721 GACTGATTCACCACTATGTCTCCCAAAAAGCGTGAAGCGGCGCGCTGT 771

RESULT 4  
US-09-598-982C-26

Sequence 26, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffett, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
CURRENT FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 26  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-26

Query Match 99.2%; Score 764.6; DB 1; Length 771;

Best Local Similarity 99.5%; Pred. No. 0.039; Mismatches 4; Indels 0; Gaps 0;

Matches 767; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGAAATGCTGCGGGGTCAGAGAGCCCCCAGAGCAATGCGCTTG 60  
Db 1 GGGCCCCCTCGAGAAAAGAAATGCTGCGGGGTCAGAGAGCCCCCAGAGCAATGCGCTTG 60  
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120  
Db 61 CAGGTGAGCTGAGAGTCCACGGCCCATCTGATGCACTTCTGCGGGGCTCCCTCATC 120  
QY 121 CACCCCGCTGGGTGCTGACCGGAGCGCACTGCGTGGGACCGGAGCTCAAGATTTGGCC 180  
Db 121 CACCCCGCTGGGTGCTGACCGGAGCGCACTGCGTGGGACCGGAGCTCAAGATTTGGCC 180  
QY 181 GCGCTCAGGGTGCACCTGCGGAGCAGACCTCTTACACCGCCAGATCGAGCGGACATCGCCTG 240  
Db 181 GCGCTCAGGGTGCACCTGCGGAGCAGACCTCTTACACCGCCAGATCGAGCGGACATCGCCTG 240  
QY 241 AGCAGGATCATCTGTGCAACCAAGTTCTTACACCGCCAGATCGAGCGGACATCGCCTG 300  
Db 241 AGCAGGATCATCTGTGCAACCAAGTTCTTACACCGCCAGATCGAGCGGACATCGCCTG 300  
QY 301 CTGAGCTGAGAGAGCGGCTGAACGTCTTCAAGCCAGCTTCAAGCTCACTCTGCCCCCT 360  
Db 301 CTGAGCTGAGAGAGCGGCTGAACGTCTTCAAGCCAGCTTCAAGCTCACTCTGCCCCCT 360

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Db 301 CTGAGCTGAGAGACCGGTGAAGCTTTCACGCACTTCACACGGTCACTCCCTCCCT 360
Qy 361 GCGTCAGAGACCTTCCCGGGGAGATGCCGTGCTGAGTCACTGCTGGGGCGATGTGAC 420
Db 361 GCGTCAGAGACCTTCCCGGGGAGATGCCGTGCTGAGTCACTGCTGGGGCGATGTGAC 420
Qy 421 AATGATGAGCGCTCCCAACCGCCATTTCCTTGAAAGCAGGTGAAGTCCCATTAATGAA 480
Db 421 AATGATGAGCGCTCCCAACCGCCATTTCCTTGAAAGCAGGTGAAGTCCCATTAATGAA 480
Qy 481 AACCAATTGTGAGCGAAATATACCACTTGGCGCTACACGGGAGACGACGTCCGCATC 540
Db 481 AACCAATTGTGAGCGAAATATACCACTTGGCGCTACACGGGAGACGACGTCCGCATC 540
Qy 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCCGAGGAGACTATGTCAAGCGACGCG 600
Db 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCCGAGGAGACTATGTCAAGCGACGCG 600
Qy 601 GCGGACCTGTGTGTGTCAGGTGAATGGACCTGCTGACAGCGGGCGTGTCACTG 660
Db 601 GCGGACCTGTGTGTGTCAGGTGAATGGACCTGCTGACAGCGGGCGTGTCACTG 660
Qy 661 GCGGAGGGGTGTGCCAGGCCCAACCGGCGCTGGCATCTACACCGGTCACTACTT 720
Db 661 GCGGAGGGGTGTGCCAGGCCCAACCGGCGCTGGCATCTACACCGGTCACTACTT 720
Qy 721 GACTGGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGT 771
Db 721 GACTGGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGT 771
```

```
RESULT 5
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patencin version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-8
```

```
Query Match 98.5%; Score 759.8; DB 1; Length 771;
Best Local Similarity 99.1%; Pred. No. 0.041;
Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
```

```
Qy 1 GGGCCCCCTGAGAAAAAGATGCTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTG 60
Db 1 GGGCCCCCTGAGAAAAAGATGCTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTG 60
Qy 61 CAGGTAGAGCTGAGAGTCCAGCGGCCCATCTGATGCACTTCTGCGGGGGCTCCCTCATC 120
Db 61 CAGGTAGAGCTGAGAGTCCAGCGGCCCATCTGATGCACTTCTGCGGGGGCTCCCTCATC 120
Qy 121 CACCCCTCACTGGGTGTGACCGCAGCGCACTGCTGGGACCGGACGTCAAGAGCTTGGCC 180
Db 121 CACCCCTCACTGGGTGTGACCGCAGCGCACTGCTGGGACCGGACGTCAAGAGCTTGGCC 180
Qy 181 GCGCTCAGGGGTGCAACTGCGGGAGACGACCTCTACTACAGAGCAAGCTGCTGCCGGTC 240
```

```
Db 181 GCGCTCAGGGGTGCAACTGCGGGAGACGACCTCTACTACAGAGCAAGCTGCTGCCGGTC 240
Qy 241 AGCAGATCATCTGTGACACCCACAGTTCTTACACCGCCAGATCGAGCGGACATCGCCCTG 300
Db 241 AGCAGATCATCTGTGACACCCACAGTTCTTACACCGCCAGATCGAGCGGACATCGCCCTG 300
Qy 301 CTGAGCTGAGAGAGCCGGGTGAACGTCTTCAGCCCACTTCACAGGTGACCTTGCCTCT 360
Db 301 CTGAGCTGAGAGAGCCGGGTGAACGTCTTCAGCCCACTTCACAGGTGACCTTGCCTCT 360
Qy 361 GCGTCAGAGACCTTCCCGGGGAGATGCCGTGCTGAGTCACTGCTGGGGCGATGTGAC 420
Db 361 GCGTCAGAGACCTTCCCGGGGAGATGCCGTGCTGAGTCACTGCTGGGGCGATGTGAC 420
Qy 421 AATGATGAGCGCTCCCAACCGCCATTTCCTTGAAAGCAGGTGAAGTCCCATTAATGAA 480
Db 421 AATGATGAGCGCTCCCAACCGCCATTTCCTTGAAAGCAGGTGAAGTCCCATTAATGAA 480
Qy 481 AACCAATTGTGAGCGAAATATACCACTTGGCGCTACACGGGAGACGACGTCCGCATC 540
Db 481 AACCAATTGTGAGCGAAATATACCACTTGGCGCTACACGGGAGACGACGTCCGCATC 540
Qy 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCCGAGGAGACTATGTCAAGCGACGCG 600
Db 541 GTCCGTGACGACATGTGTGTGTCGGGAAACACCCGAGGAGACTATGTCAAGCGACGCG 600
Qy 601 GCGGACCTGTGTGTGTCAGGTGAATGGACCTGCTGACAGCGGGCGTGTCACTG 660
Db 601 GCGGACCTGTGTGTGTCAGGTGAATGGACCTGCTGACAGCGGGCGTGTCACTG 660
Qy 661 GCGGAGGGGTGTGCCAGGCCCAACCGGCGCTGGCATCTACACCGGTCACTACTT 720
Db 661 GCGGAGGGGTGTGCCAGGCCCAACCGGCGCTGGCATCTACACCGGTCACTACTT 720
Qy 721 GACTGGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGT 771
Db 721 GACTGGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGCGCGCTGT 771
```

```
RESULT 6
US-09-598-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patencin version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38
```

```
Query Match 98.3%; Score 758.2; DB 1; Length 771;
Best Local Similarity 99.0%; Pred. No. 0.041;
Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;
```

```
Qy 1 GGGCCCCCTGAGAAAAAGATGCTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTG 60
Db 1 GGGCCCCCTGAGAAAAAGATGCTCGGGGGTCAAGAGGCCCCCAAGAGCAAGTGGCCCTG 60
```



```
QY 61 CAGGTGAGCTTGAGAGTCCAGGCCCATACTGATGCACTTCTGCGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAGAGTCCAGGCCCATACTGATGCACTTCTGCGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGCTGACCGGACCGGCACTGCGTGGGACCGGAGCTGAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTGCTGACCGGACCGGCACTGCGTGGGACCGGAGCTGAAGATCTGGCC 180
QY 181 GCCCTCAGGGGTGCAACTGCGGGAGCAGCACTCTACTACAGAGACAGCTGCTGCGGGTTC 240
DB 181 GCCCTCAGGGGTGCAACTGCGGGAGCAGCACTCTACTACAGAGACAGCTGCTGCGGGTTC 240
QY 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGAGCCGGTGAAGCTCTCCAGCCACGTTCCACAGGTCACCTTGCCCTT 360
DB 301 CTGAGAGCTGAGAGAGCCGGTGAAGCTCTCCAGCCACGTTCCACAGGTCACCTTGCCCTT 360
QY 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGGTCACTGGCTGGGGGGATGTGAC 420
DB 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGGTCACTGGCTGGGGGGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCCATTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
DB 421 AATGATGAGCGCTCCCAACCGCCATTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
QY 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTACACGGAGAGACGATCGCATC 540
DB 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTACACGGAGAGACGATCGCATC 540
QY 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGAGGACTATGTCAGAGGAGCC 600
DB 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGAGGACTATGTCAGAGGAGCC 600
QY 601 GGCGGACCTCTGTGTGTGCAAGTGAATGCACTGTGCTGACGCGGGGTGTGACCTGG 660
DB 601 GGCGGACCTCTGTGTGTGCAAGTGAATGCACTGTGCTGACGCGGGGTGTGACCTGG 660
QY 661 GGCGGAGGCTGTGCCAGCCCAACCGGCTGTGACCTACACCGGTGTCACTACTTGG 720
DB 661 GGCGGAGGCTGTGCCAGCCCAACCGGCTGTGACCTACACCGGTGTCACTACTTGG 720
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTCGT 771
DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTCGT 771

RESULT 7
US-09-598-982C-22
; Sequence 22, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-22
```

```
Query Match 98.1%; Score 756.6; DB 1; Length 771;
Best Local Similarity 98.8%; Pred. No. 0.042;
Matches 762; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 1 GGGCCCTTCAGAAAGAAATCTGCGGGGTGCAAGAGGCCCCCAAGACAGAGTGGCCCTGG 60
DB 1 GGGCCCTTCAGAAAGAAATCTGCGGGGTGCAAGAGGCCCCCAAGAGTGGCCCTGG 60
QY 61 CAGGTGAGCTTGAGAGTCCAGGCCCATACTGATGCACTTCTGCGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTTGAGAGTCCAGGCCCATACTGATGCACTTCTGCGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGCTGACCGGACCGGCACTGCGTGGGACCGGAGCTGAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTGCTGACCGGACCGGCACTGCGTGGGACCGGAGCTGAAGATCTGGCC 180
QY 181 GCCCTCAGGGGTGCAACTGCGGGAGCAGCACTCTACTACAGAGACAGCTGCTGCGGGTTC 240
DB 181 GCCCTCAGGGGTGCAACTGCGGGAGCAGCACTCTACTACAGAGACAGCTGCTGCGGGTTC 240
QY 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATCTGTGACCCCAAGTTCTACACCGCCAGATCGAGCGGACATCGCCCTG 300
QY 301 CTGAGAGCTGAGAGAGCCGGTGAAGCTCTCCAGCCACGTTCCACAGGTCACCTTGCCCTT 360
DB 301 CTGAGAGCTGAGAGAGCCGGTGAAGCTCTCCAGCCACGTTCCACAGGTCACCTTGCCCTT 360
QY 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGGTCACTGGCTGGGGGGATGTGAC 420
DB 361 GCGTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGGTCACTGGCTGGGGGGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCCATTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
DB 421 AATGATGAGCGCTCCCAACCGCCATTCTCTGAAGCAGGTGAAGTCCCATATGGA 480
QY 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTACACGGAGAGACGATCGCATC 540
DB 481 AACCAATTGTGACGCAAAATACCACTTGGCGCTACACGGAGAGACGATCGCATC 540
QY 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGAGGACTATGTCAGAGGAGCC 600
DB 541 GTCCGTACGACATGCTGTGTGCGGGAAACACCGGAGAGGACTATGTCAGAGGAGCC 600
QY 601 GGCGGACCTCTGTGTGTGCAAGTGAATGCACTGTGCTGACGCGGGGTGTGACCTGG 660
DB 601 GGCGGACCTCTGTGTGTGCAAGTGAATGCACTGTGCTGACGCGGGGTGTGACCTGG 660
QY 661 GGCGGAGGCTGTGCCAGCCCAACCGGCTGTGACCTACACCGGTGTCACTACTTGG 720
DB 661 GGCGGAGGCTVTGCCAGCCCAACCGGCTGTGACCTACACCGGTGTCACTACTTGG 720
QY 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTCGT 771
DB 721 GACTGATCCACCACTATGTCTCCCAAAAAGCCGTGAAGCGGCGCGCTCGT 771

RESULT 8
US-09-598-982C-36
; Sequence 36, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
```

```

; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-36

Query Match      97.9%; Score 755; DB 1; Length 771;
Best Local Similarity 98.7%; Pred. No. 0.042;
Matches 761; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAAATGTCGCGGGGTGACAGAGGCCCCCAGAGCAAGTGCCCTGG 60
DB 1 GGGCCCTCGAGAAAAAATGTCGCGGGGTGACAGAGGCCCCCAGAGCAAGTGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCTTCTGGAATGCACTTCTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCACGGCCCTTCTGGAATGCACTTCTGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGAGCACTGCTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGAGCACTGCTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTGCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCAGGTC 240
DB 181 GGCCTCAGGGGTGCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCAGGTC 240
QY 241 AGCAGGATCATGTGTGACACCAAGTTCTACACCGCCAGATGGAGCCGACATTCGCCCTG 300
DB 241 AGCAGGATCATGTGTGACACCAAGTTCTACACCGCCAGATGGAGCCGACATTCGCCCTG 300
QY 301 CTGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCCACACGGTCACTCTGCCCCCT 360
DB 301 CTGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCCACACGGTCACTCTGCCCCCT 360
QY 361 GCTTCAGAGACCTTCCCCCGGGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
DB 361 GCTTCAGAGACCTTCCCCCGGGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
QY 421 GCTTCAGAGACCTTCCCCCGGGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 480
DB 421 GCTTCAGAGACCTTCCCCCGGGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 480
QY 481 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
DB 481 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
QY 541 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 600
DB 541 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 600
QY 601 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 660
DB 601 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 660
QY 661 GGCAGAGGCTGTGCGCAGCGCAACCGGCTGACATCAACCCGCTGCACTACTACTTTG 720
DB 661 GGCAGAGGCTGTGCGCAGCGCAACCGGCTGACATCAACCCGCTGCACTACTACTTTG 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAAGCGTGAAGCGCGCGCTGT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAAGCGTGAAGCGCGCGCTGT 771

RESULT 9
; US-09-598-982C-20
; Sequence 20, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafiltc, Mark
```

```

; APPLICANT: Haak-Frendocho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 20
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
; US-09-598-982C-20

Query Match      97.7%; Score 753.4; DB 1; Length 771;
Best Local Similarity 98.6%; Pred. No. 0.043;
Matches 760; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAAAATGTCGCGGGGTGACAGAGGCCCCCAGAGCAAGTGCCCTGG 60
DB 1 GGGCCCTCGAGAAAAAATGTCGCGGGGTGACAGAGGCCCCCAGAGCAAGTGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCACGGCCCTTCTGGAATGCACTTCTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCACGGCCCTTCTGGAATGCACTTCTGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGAGCACTGCTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGAGCACTGCTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTGCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCAGGTC 240
DB 181 GGCCTCAGGGGTGCAACTGCGGAGAGCACTCTACTACAGAGCAAGCTGCTGCAGGTC 240
QY 241 AGCAGGATCATGTGTGACACCAAGTTCTACACCGCCAGATGGAGCCGACATTCGCCCTG 300
DB 241 AGCAGGATCATGTGTGACACCAAGTTCTACACCGCCAGATGGAGCCGACATTCGCCCTG 300
QY 301 CTGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCCACACGGTCACTCTGCCCCCT 360
DB 301 CTGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCCACACGGTCACTCTGCCCCCT 360
QY 361 GCTTCAGAGACCTTCCCCCGGGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
DB 361 GCTTCAGAGACCTTCCCCCGGGAGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 480
QY 481 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 540
DB 481 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGCAGGTGAAGTCCCATTAATGAA 540
QY 541 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 600
DB 541 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 600
QY 601 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 660
DB 601 GTCGTGACGACATGCTGTGTGCGCGGAAACACCGGAGGAACTCATTTCAAGCGACGCC 660
QY 661 GGCAGAGGCTGTGCGCAGCGCAACCGGCTGACATCAACCCGCTGCACTACTACTTTG 720
DB 661 GGCAGAGGCTGTGCGCAGCGCAACCGGCTGACATCAACCCGCTGCACTACTACTTTG 720
QY 721 GACTGATTCACCACTATGTCCCAAAAAAGCGTGAAGCGCGCGCTGT 771
DB 721 GACTGATTCACCACTATGTCCCAAAAAAGCGTGAAGCGCGCGCTGT 771
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Db 721 GACTGATCACTATGTCCCAAAAAAGCGTGAGCGGCGCGTGTGT 771

RESULT 10  
US-09-598-982C-10  
Sequence 10, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598, 982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079, 970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 10  
LENGTH: 735  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (1)..(735)  
US-09-598-982C-10

Query Match 93.9%; Score 723.8; DB 1; Length 735;  
Best Local Similarity 99.0%; Pred. No. 0.06;  
Matches 728; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 19 ATCTGCGGGGTCAGGAGGCCCCCAGGAGCAAGTGGCCCTGAGCTGAGCTGAGATC 78  
Db 1 ATCTGCGGGGTCAGGAGGCCCCCAGGAGCAAGTGGCCCTGAGCTGAGCTGAGATC 60

Qy 79 CACGGCCCATCTAGTATGATGACCTTCTGCGGGGGCTCCCTCATTCACCCCAAGTGGTGTG 138  
Db 61 CACGGCCCATCTAGTATGATGACCTTCTGCGGGGGCTCCCTCATTCACCCCAAGTGGTGTG 120

Qy 139 ACCGAGGCACTGCTGGTGGAGCCGAGCGTCAAGATCTTGAGCCCTTGAGGGTGCATCTG 198  
Db 121 ACCGAGGCACTGCTGGTGGAGCCGAGCGTCAAGATCTTGAGCCCTTGAGGGTGCATCTG 180

Qy 199 CGGAGAGCAGCACTTCTATACAGAGCAAGCTGCTGCGCGGTGAGAGATCATGTGTGAC 258  
Db 181 CGGAGAGCAGCACTTCTATACAGAGCAAGCTGCTGCGCGGTGAGAGATCATGTGTGAC 240

Qy 259 CCACAGTTCTACACGCGCCAGATCGAGCGGAGCATGCGCTGTGAGAGCTGAGAGCGG 318  
Db 241 CCACAGTTCTACACGCGCCAGATCGAGCGGAGCATGCGCTGTGAGAGCTGAGAGCGG 300

Qy 319 GTGAAGCTCTCAGCGCAAGTCAACCGTCAACCTGCCCCCTGCTCAGAACCTTCCCC 378  
Db 301 GTGAAGCTCTCAGCGCAAGTCAACCGTCAACCTGCCCCCTGCTCAGAACCTTCCCC 360

Qy 379 CCGGAGATCGCTGCTGTGGTCACTGCGTGGGCGCATGTGAGCAATGATGAGCGCTCCCA 438  
Db 361 CCGGAGATCGCTGCTGTGGTCACTGCGTGGGCGCATGTGAGCAATGATGAGCGCTCCCA 420

Qy 439 CCGCATTTCTCTGAGAGCAGGTGAGGTCCCATTAATGAAAAACCAATTGTGAGCGCA 498  
Db 421 CCGCATTTCTCTGAGAGCAGGTGAGGTCCCATTAATGAAAAACCAATTGTGAGCGCA 480

Qy 499 AAATACCACTTTGAGCGCTTACACGAGAGACAGCGTCCGATCTGCTGAGCAATGCTG 558  
Db 481 AAATACCACTTTGAGCGCTTACACGAGAGACAGCGTCCGATCTGCTGAGCAATGCTG 540

Qy 559 TGTGCGCGGAGAACCCCGAGAGGACTCATGTCAAGCGCAACCGCGGAGACTCTGTGTGTC 618  
Db 541 TGTGCGCGGAGAACCCCGAGAGGACTCATGTCAAGCGCAACCGCGGAGACTCTGTGTGTC 600

Qy 619 AAGGTGAATGAGCACTGTGCTGAGGCGGGCTGTGATCACTGCGGCGAGAGGCTGTGCCAG 678

Db 601 AAGGTGAATGAGCACTGTGCTGAGGCGGGCGTGTCAAGCTGCGGCGAGAGGCTGTGCCAG 660

Qy 679 CCGAAGCGGCTTGAGCTTACACCGGTGTACCTACTACTTGGAGTGGATCCACCATAT 738  
Db 661 CCGAAGCGGCTTGAGCTTACACCGGTGTACCTACTACTTGGAGTGGATCCACCATAT 720

Qy 739 GTCCCAAAAAAGCGG 753  
Db 721 GTCCCAAAAAAGCGG 735

RESULT 11  
US-09-598-982C-8/c  
Sequence 8, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598, 982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079, 970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 8  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-8

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 GGGCCCTCGAGAAAGATGCTGCGGGGTTCAGAGAGCCCCCAGAGCAAGTGGCCCTG 60  
Db 113 GAGCCCCCGAGAGTGCATCTAGTGGGCGGTGAGACTCTCAGGCTCACTGCAAGGCG 54

Qy 61 CAGGTGAGCTTGAAGTCAACGCGCCCATTAATGAGCACTTCTGCGGGGCTC 113  
Db 53 CACTGTCTCTGGGGGCTCTCTGACCCCGACGATTCCTTTCTGAGGGGCGCC 1

RESULT 12  
US-09-598-982C-20/c  
Sequence 20, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598, 982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079, 970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 20  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)

US-09-598-982C-20

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

OY 1 GGGCCCTCGAGAAAAGATGCTCGGGGTCAGAGAGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAAAGTGCATCAGATAGGGCCGTGACTCTCAGGCTCAGCCTGCCAGGGC 54  
OY 61 CAGGTAGCCTGAGATGCCAGGCCCATACTGATGCACTTGTGGGGGCTC 113  
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTTCTTCGAGGGGGCC 1

RESULT 13

US-09-598-982C-22/c

; Sequence 22, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 22  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-22

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

OY 1 GGGCCCTCGAGAAAAGATGCTCGGGGTCAGAGAGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAAAGTGCATCAGATAGGGCCGTGACTCTCAGGCTCAGCCTGCCAGGGC 54  
OY 61 CAGGTAGCCTGAGATGCCAGGCCCATACTGATGCACTTGTGGGGGCTC 113  
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTTCTTCGAGGGGGCC 1

RESULT 14

US-09-598-982C-24/c

; Sequence 24, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 24  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens

; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-24

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

OY 1 GGGCCCTCGAGAAAAGATGCTCGGGGTCAGAGAGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAAAGTGCATCAGATAGGGCCGTGACTCTCAGGCTCAGCCTGCCAGGGC 54  
OY 61 CAGGTAGCCTGAGATGCCAGGCCCATACTGATGCACTTGTGGGGGCTC 113  
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTTCTTCGAGGGGGCC 1

RESULT 15

US-09-598-982C-26/c

; Sequence 26, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 26  
; LENGTH: 771  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (7)..(753)  
US-09-598-982C-26

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

OY 1 GGGCCCTCGAGAAAAGATGCTCGGGGTCAGAGAGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAAAGTGCATCAGATAGGGCCGTGACTCTCAGGCTCAGCCTGCCAGGGC 54  
OY 61 CAGGTAGCCTGAGATGCCAGGCCCATACTGATGCACTTGTGGGGGCTC 113  
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTTCTTCGAGGGGGCC 1

RESULT 16

US-09-598-982C-36/c

; Sequence 36, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 36

```
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-36
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCTCGAAGAAAGATGTCGGGGGTCAAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGAGAAAGTGCATCAGATATGGGCCGTGAGACTCTCAGGCTCACTGCGCAGGGC 54
      |||||

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATATCGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCCC 1
      |||||
```

```
RESULT 17
US-09-598-982C-38/c
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCTCGAAGAAAGATGTCGGGGGTCAAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGAGAAAGTGCATCAGATATGGGCCGTGAGACTCTCAGGCTCACTGCGCAGGGC 54
      |||||

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATATCGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCCC 1
      |||||
```

```
RESULT 18
US-09-598-982C-40/c
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
```

```
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCTCGAAGAAAGATGTCGGGGGTCAAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGAGAAAGTGCATCAGATATGGGCCGTGAGACTCTCAGGCTCACTGCGCAGGGC 54
      |||||

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATATCGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCCC 1
      |||||
```

```
RESULT 19
US-09-598-982C-42/c
; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCTCGAAGAAAGATGTCGGGGGTCAAGAGAGCCCGCAGAGCAAGTGGCCCTGG 60
   |||||
DB 113 GAGCCCCCGAGAAAGTGCATCAGATATGGGCCGTGAGACTCTCAGGCTCACTGCGCAGGGC 54
      |||||

QY 61 CAGGTGAGCCTGAGAGTCCACGGCCCATATCGATGCACTTCTGCGGGGGCTC 113
   |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTTCTCGAGGGGGCCC 1
      |||||
```

```
RESULT 20
US-09-598-982C-10/c
; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
```

/ CURRENT FILING DATE: 2000-06-21  
 / PRIOR APPLICATION NUMBER: 09/079,970  
 / PRIOR FILING DATE: 1998-04-15  
 / NUMBER OF SEQ ID NOS: 52  
 / SOFTWARE: PatentIn version 3.3  
 / SEQ ID NO 10  
 / LENGTH: 735  
 / TYPE: DNA  
 / ORGANISM: Homo sapiens  
 / FEATURE:  
 / NAME/KEY: CDS  
 / LOCATION: (1)..(735)  
 / US-09-598-982C-10

Query Match 3.3%; Score 25.6; DB 1; Length 735;  
 Best Local Similarity 52.4%; Pred. No. 18;  
 Matches 99; Conservative 0; Mismatches 84; Indels 6; Gaps 2;

QY 286 GCGACATCGCCCTGTGAGCTGAGAGAGCCGCTGACCTTCCAGCAGCAGTCCACAG 345  
 DB 453 GGGGACCTTCACTGCTTCAGAGAAATGCGGTGGAGGCGCTCATCATGTGCA-- 396  
 QY 346 GTACACCTGCCCCCTGCTCAGAGACCTTCCCCCGGGGATGCCGTGCTGCTCACTGCG 405  
 DB 395 -TGGCCCCAGTACGACGACGAGCGGCACTCCCGGGGAAAGTCTCTGAGGCGAGGGG 337  
 QY 406 TGGGCGCA--TGTGACATGATGAGCGCTCCACCGCATTTCTCTGAAGAGGTG 462  
 DB 336 CAGGTGACCGCTGTGACCTGTGAGACCTTCAACCGGCTCTCTCAGCTCAGCAGCGGC 277  
 QY 463 AAGTCCCC 471  
 DB 276 GATGTCCG 268

Search completed: August 26, 2005, 12:32:36  
 Job time : 4.81314 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model  
 Run on: August 26, 2005, 12:31:55 ; Search time 2.81314 Seconds  
 (without alignments)  
 4.206 Million cell updates/sec

Title: US-09-598-982C-42  
 Perfect score: 771  
 Sequence: 1 gggccctcgagaaagaat.....cgtgaagcgccgcctcgt 771

Scoring table: IDENTITY\_NUC  
 Gapop 10.0 , Gapext 0.5

Searched: 10 seqs, 7674 residues

Total number of hits satisfying chosen parameters: 20

Minimum DB seq length: 0  
 Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 200 summaries

Database : US09598982C\_rev.seq:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

## ALIGNMENTS

Result No.	Score	Query Match	Length	DB	ID	Description
1	771	100.0	771	1	US-09-598-982C-42	Sequence 42, Appl
2	769.4	99.8	771	1	US-09-598-982C-26	Sequence 26, Appl
3	766.2	99.4	771	1	US-09-598-982C-40	Sequence 40, Appl
4	764.6	99.2	771	1	US-09-598-982C-24	Sequence 24, Appl
5	759.8	98.5	771	1	US-09-598-982C-8	Sequence 8, Appl
6	758.2	98.3	771	1	US-09-598-982C-38	Sequence 38, Appl
7	756.6	98.1	771	1	US-09-598-982C-22	Sequence 22, Appl
8	755	97.9	771	1	US-09-598-982C-36	Sequence 36, Appl
9	753.4	97.7	771	1	US-09-598-982C-20	Sequence 20, Appl
10	723.8	93.9	735	1	US-09-598-982C-10	Sequence 10, Appl
11	28.2	3.7	771	1	US-09-598-982C-8	Sequence 8, Appl
12	28.2	3.7	771	1	US-09-598-982C-20	Sequence 20, Appl
13	28.2	3.7	771	1	US-09-598-982C-22	Sequence 22, Appl
14	28.2	3.7	771	1	US-09-598-982C-24	Sequence 24, Appl
15	28.2	3.7	771	1	US-09-598-982C-26	Sequence 26, Appl
16	28.2	3.7	771	1	US-09-598-982C-36	Sequence 36, Appl
17	28.2	3.7	771	1	US-09-598-982C-38	Sequence 38, Appl
18	28.2	3.7	771	1	US-09-598-982C-40	Sequence 40, Appl
19	28.2	3.7	771	1	US-09-598-982C-42	Sequence 42, Appl
20	25.6	3.3	735	1	US-09-598-982C-10	Sequence 10, Appl

RESULT 1  
 US-09-598-982C-42  
 / Sequence 42, Application US/09598982C

/ GENERAL INFORMATION:  
 / APPLICANT: Miles, Andrew  
 / APPLICANT: Maffitt, Mark  
 / APPLICANT: Haak-Frendelch, Mary  
 / TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINASES, ACTIVE SITE MUTANTS THEREOF,  
 / FILE REFERENCE: 34506.104  
 / CURRENT APPLICATION NUMBER: US/09/598,982C  
 / CURRENT FILING DATE: 2000-06-21  
 / PRIOR APPLICATION NUMBER: 09/079,970  
 / PRIOR FILING DATE: 1998-04-15  
 / NUMBER OF SEQ ID NOS: 52  
 / SOFTWARE: PatentIn version 3.3  
 / SEQ ID NO 42  
 / LENGTH: 771  
 / TYPE: DNA  
 / ORGANISM: Homo sapiens  
 / FEATURE:  
 / NAME/KEY: CDS  
 / LOCATION: (7)..(753)  
 / US-09-598-982C-42

Query Match 100.0%; Score 771; DB 1; Length 771;  
 Best Local Similarity 100.0%; Pred. No. 0.037;  
 Matches 771; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	GGGCCCCCTCGAGAAAGATGCTGGGGGTCAAGAGAGGCCCCAGAGCAAGTGGCCCTGG 60
DB	1	GGGCCCCCTCGAGAAAGATGCTGGGGGTCAAGAGAGGCCCCAGAGCAAGTGGCCCTGG 60
QY	61	CAGTGAAGCTGAGATCCAGCGCCCATATGATGCACTTCTGCGGGGCTCCCTCATC 120
DB	61	CAGTGAAGCTGAGATCCAGCGCCCATATGATGCACTTCTGCGGGGCTCCCTCATC 120
QY	121	CACCCCAAGTGGTCTGACCGACGCACTGCTGGGACCGGACGTCAAGATCTGGCC 180
DB	121	CACCCCAAGTGGTCTGACCGACGCACTGCTGGGACCGGACGTCAAGATCTGGCC 180
QY	181	GCCCTCAGAGTGCACCTGCGGAGAGCACTCTACTACAGAGACCAAGTGTGCGCGTC 240
DB	181	GCCCTCAGAGTGCACCTGCGGAGAGCACTCTACTACAGAGACCAAGTGTGCGCGTC 240

```
QY 241 AGCAGATCATCTGTCACCCACAGTTCTACACCGCCGATCGGAGCGGACATGCGCCCTG 300
DB 241 AGCAGATCATCTGTCACCCACAGTTCTACACCGCCGATCGGAGCGGACATGCGCCCTG 300
QY 301 CTGAGGCTGAGAGAGCGCGGTGAAGCTCTCCAGCCACGTCACACGTCACCTGCCCCCT 360
DB 301 CTGAGGCTGAGAGAGCGCGGTGAAGCTCTCCAGCCACGTCACACGTCACCTGCCCCCT 360
QY 361 GCGTCAGAGACCTTCCCCCGGGGATGCGGTCTGGGTCACTGGCTGGGGGAGATGTGAC 420
DB 361 GCGTCAGAGACCTTCCCCCGGGGATGCGGTCTGGGTCACTGGCTGGGGGAGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGAGGAGTAAAGTCCCATATGGA 480
DB 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGAGGAGTAAAGTCCCATATGGA 480
QY 481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTTACACGGAAGACGAGTCGCGATC 540
DB 481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTTACACGGAAGACGAGTCGCGATC 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCGCAAGAGAGCGC 600
DB 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCGCAAGAGAGCGC 600
QY 601 GCGCGACCACTGTGTGTGCAAGTGAATGGCACTGGCTGCAAGGCGGGGTGTGAGCTGG 660
DB 601 GCGCGACCACTGTGTGTGCAAGTGAATGGCACTGGCTGCAAGGCGGGGTGTGAGCTGG 660
QY 661 GCGAGGGGCTGTGCGCCAGCCCAACCGGCTGGCATCTTACCCGTGTCACTACTTGG 720
DB 661 GCGAGGGGCTGTGCGCCAGCCCAACCGGCTGGCATCTTACCCGTGTCACTACTTGG 720
QY 721 GACTGATTCACCACTATGTGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
DB 721 GACTGATTCACCACTATGTGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
```

```
RESULT 2
US-09-598-982C-26
; Sequence 26, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-26
```

```
Query Match 99.8%; Score 769.4; DB 1; Length 771;
Best Local Similarity 99.9%; Pred. No. 0.037;
Matches 770; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 GGGGCCCCCGAGAAAGATGTCGGGGTCAAGAGGCCCCCAAGAGAAATGGCCCTGG 60
DB 1 GGGGCCCCCGAGAAAGATGTCGGGGTCAAGAGGCCCCCAAGAGAAATGGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCGCATATGATGCACTTCTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCGCATATGATGCACTTCTGGGGGGCTCCCTCATC 120
```

```
DB 61 CAGGTGAGCTGAGAGTCCAGGCGCATATGATGCACTTCTGGGGGGCTCCCTCATC 120
QY 121 CACCCGAGTGGGTGTGACCGGACGCGACTGGGAGACCGAGCTCAAGATCTGGCC 180
DB 121 CACCCGAGTGGGTGTGACCGGACGCGACTGGGAGACCGAGCTCAAGATCTGGCC 180
QY 181 GCGCTCAGGGGTGCAATCTGCGGAGACAGACCTCTACTACAGAGACAGACTGCTCGGTC 240
DB 181 GCGCTCAGGGGTGCAATCTGCGGAGACAGACCTCTACTACAGAGACAGACTGCTCGGTC 240
QY 241 AGCAGATCATCTGTCACCCACAGTTCTTACACCGCCAGATCGGAGCGGACATGCGCTG 300
DB 241 AGCAGATCATCTGTCACCCACAGTTCTTACACCGCCAGATCGGAGCGGACATGCGCTG 300
QY 301 CTGAGGCTGAGAGAGCGCGGTGAAGCTCTCCAGCCACGTCACACGTCACCTGCCCCCT 360
DB 301 CTGAGGCTGAGAGAGCGCGGTGAAGCTCTCCAGCCACGTCACACGTCACCTGCCCCCT 360
QY 361 GCGTCAGAGACCTTCCCCCGGGGATGCGGTCTGGGTCACTGGCTGGGGGAGATGTGAC 420
DB 361 GCGTCAGAGACCTTCCCCCGGGGATGCGGTCTGGGTCACTGGCTGGGGGAGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGAGGAGTAAAGTCCCATATGGA 480
DB 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAGAGGAGTAAAGTCCCATATGGA 480
QY 481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTTACACGGAAGACGAGTCGCGATC 540
DB 481 AACCAATTTGTGACGCAAAATACACCTTGGCGCTTACACGGAAGACGAGTCGCGATC 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCGCAAGAGAGCGC 600
DB 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCGCAAGAGAGCGC 600
QY 601 GCGCGACCACTGTGTGTGCAAGTGAATGGCACTGGCTGCAAGGCGGGGTGTGAGCTGG 660
DB 601 GCGCGACCACTGTGTGTGCAAGTGAATGGCACTGGCTGCAAGGCGGGGTGTGAGCTGG 660
QY 661 GCGAGGGGCTGTGCGCCAGCCCAACCGGCTGGCATCTTACCCGTGTCACTACTTGG 720
DB 661 GCGAGGGGCTGTGCGCCAGCCCAACCGGCTGGCATCTTACCCGTGTCACTACTTGG 720
QY 721 GACTGATTCACCACTATGTGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
DB 721 GACTGATTCACCACTATGTGTCCCAAAAAGCGGTGAAGCGGCGCGCTGCT 771
```

```
RESULT 3
US-09-598-982C-40
; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40
```

```
Query Match 99.4%; Score 766.2; DB 1; Length 771;
```



```
Best Local Similarity 99.6%; Pred. No. 0.038;
Matches 768; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATATCTGATGCACTTTCTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATATCTGATGCACTTTCTGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGTGACCGCAGGCGCATCTGTTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTGTGACCGCAGGCGCATCTGTTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTGCAACTGGGGAGAGCACTCTTACTACAGAGACCAAGTGTGCGGTC 240
DB 181 GGCCTCAGGGGTGCAACTGGGGAGAGCACTCTTACTACAGAGACCAAGTGTGCGGTC 240
QY 241 AGCAGATCATCTGTGCACTCCACAGTTCTACACCGCCAGATGAGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATCTGTGCACTCCACAGTTCTACACCGCCAGATGAGAGCGGACATCGCCCTG 300
QY 301 CTGGAGCTGAGAGAGCCGGTGAACGTCTCAGCCAGTCAAGGATCACTGCGCCCT 360
DB 301 CTGGAGCTGAGAGAGCCGGTGAACGTCTCAGCCAGTCAAGGATCACTGCGCCCT 360
QY 361 GGCCTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCTCATGTGGGGCGATGTGAC 420
DB 361 GGCCTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCTCATGTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAAGAGTGAAGTCCCAATAATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAAGAGTGAAGTCCCAATAATGAA 480
QY 481 AACCAATTGTGAGCAAAATAACACCTTGGGCGCTACAGGGAGAGAGAGTCCGCAATC 540
DB 481 AACCAATTGTGAGCAAAATAACACCTTGGGCGCTACAGGGAGAGAGAGTCCGCAATC 540
QY 541 GTCCGTGACGACATCTGTGTGCGGGAAACACCGGAGGAGACTCATGCAAGAGAGCGC 600
DB 541 GTCCGTGACGACATCTGTGTGCGGGAAACACCGGAGGAGACTCATGCAAGAGAGCGC 600
QY 601 GCGGAGCACTGTGTGTGCAAGGTGAATGGCACTGTGCAAGCGGGGTGTGAGCTGG 660
DB 601 GCGGAGCACTGTGTGTGCAAGGTGAATGGCACTGTGCAAGCGGGGTGTGAGCTGG 660
QY 661 GCGGAGGCGTGTGCGCAGCGCAACCGGCTGTGCACTACACCGGTGTCACTACTTGG 720
DB 661 GCGGAGGCGTGTGCGCAGCGCAACCGGCTGTGCACTACACCGGTGTCACTACTTGG 720
QY 721 GACTGATCCACCACTATGTCCCAAAAAAGCGGTGAAGCGCGCGCTGT 771
DB 721 GACTGATCCACCACTATGTCCCAAAAAAGCGGTGAAGCGCGCGCTGT 771

RESULT 4
US-09-598-982C-24
; Sequence 24, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 24
```

```
LENGTH: 771
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (7)..(753)
US-09-598-982C-24

Query Match 99.2%; Score 764.6; DB 1; Length 771;
Best Local Similarity 99.5%; Pred. No. 0.039;
Matches 767; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATCGTGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATCGTGGGGGTGAGAGGCCCCCGAGAGCAAGTGGCCCTGG 60
QY 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATATCTGATGCACTTTCTGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCCTGAGAGTCCAGCGCCCATATCTGATGCACTTTCTGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTGTGACCGCAGGCGCATCTGTTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTGTGACCGCAGGCGCATCTGTTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GGCCTCAGGGGTGCAACTGGGGAGAGCACTCTTACTACAGAGACCAAGTGTGCGGTC 240
DB 181 GGCCTCAGGGGTGCAACTGGGGAGAGCACTCTTACTACAGAGACCAAGTGTGCGGTC 240
QY 241 AGCAGATCATCTGTGCACTCCACAGTTCTACACCGCCAGATGAGAGCGGACATCGCCCTG 300
DB 241 AGCAGATCATCTGTGCACTCCACAGTTCTACACCGCCAGATGAGAGCGGACATCGCCCTG 300
QY 301 CTGGAGCTGAGAGAGCCGGTGAACGTCTCAGCCAGTCAAGGATCACTGCGCCCT 360
DB 301 CTGGAGCTGAGAGAGCCGGTGAACGTCTCAGCCAGTCAAGGATCACTGCGCCCT 360
QY 361 GGCCTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCTCATGTGGGGCGATGTGAC 420
DB 361 GGCCTCAGAGACCTTCCCCCGGGAGTGCCTGCTGGGTCTCATGTGGGGCGATGTGAC 420
QY 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAAGAGTGAAGTCCCAATAATGAA 480
DB 421 AATGATGAGCGCTCCCAACCGCATTTCTCTGAAAGAGTGAAGTCCCAATAATGAA 480
QY 481 AACCAATTGTGAGCAAAATAACCACTTGGGCGCTACAGGGAGAGAGAGTCCGCAATC 540
DB 481 AACCAATTGTGAGCAAAATAACCACTTGGGCGCTACAGGGAGAGAGAGTCCGCAATC 540
QY 541 GTCCGTGACGACATCTGTGTGCGGGAAACACCGGAGGAGACTCATGCAAGAGAGCGC 600
DB 541 GTCCGTGACGACATCTGTGTGCGGGAAACACCGGAGGAGACTCATGCAAGAGAGCGC 600
QY 601 GCGGAGCACTGTGTGTGCAAGGTGAATGGCACTGTGCAAGCGGGGTGTGAGCTGG 660
DB 601 GCGGAGCACTGTGTGTGCAAGGTGAATGGCACTGTGCAAGCGGGGTGTGAGCTGG 660
QY 661 GCGGAGGCGTGTGCGCAGCGCAACCGGCTGTGCACTACACCGGTGTCACTACTTGG 720
DB 661 GCGGAGGCGTGTGCGCAGCGCAACCGGCTGTGCACTACACCGGTGTCACTACTTGG 720
QY 721 GACTGATCCACCACTATGTCCCAAAAAAGCGGTGAAGCGCGCGCTGT 771
DB 721 GACTGATCCACCACTATGTCCCAAAAAAGCGGTGAAGCGCGCGCTGT 771

RESULT 5
US-09-598-982C-8
; Sequence 8, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
```

```
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIORITY FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-8

Query Match      98.5%; Score 759.8; DB 1; Length 771;
Best Local Similarity 99.1%; Pred. No. 0.041;
Matches 764; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCAGAGCAATGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCAGAGCAATGGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCCCATACTGATGCACTTCTGGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCCCATACTGATGCACTTCTGGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCATGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCATGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GCCCTCAGGGTGCACCTCGGGAGAGACCTCTAACAAGACAGCTGCTGCGGTC 240
DB 181 GCCCTCAGGGTGCACCTCGGGAGAGACCTCTAACAAGACAGCTGCTGCGGTC 240
QY 241 AGCAGATCATCTGTCACCCACAGTTCTACACCGCCGAGTCGAGCGGAGCATGSCCTG 300
DB 241 AGCAGATCATCTGTCACCCACAGTTCTACACCGCCGAGTCGAGCGGAGCATGSCCTG 300
QY 301 CTGAGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCACACGAGTCACTGCCCCCT 360
DB 301 CTGAGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCACACGAGTCACTGCCCCCT 360
QY 361 GCCTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
DB 361 GCCTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
QY 421 AATGATAGGCGCTCCCAACCGCCATTTCTGTAAGAGGTGAAGTCCCATATGAGAA 480
DB 421 AATGATAGGCGCTCCCAACCGCCATTTCTGTAAGAGGTGAAGTCCCATATGAGAA 480
QY 481 AACCAATTGTGACGCAAAATATACACCTTGCGCTACACGAGAGACAGTCCGACATC 540
DB 481 AACCAATTGTGACGCAAAATATACACCTTGCGCTACACGAGAGACAGTCCGACATC 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCAAGGCGACATCC 600
DB 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCAAGGCGACATCC 600
QY 601 GGGCGACCACTGTGTGTGCAAGGTGAATGGCACTGGCTGAGGGGGGTGTCAAGCTGG 660
DB 601 GGGCGACCACTGTGTGTGCAAGGTGAATGGCACTGGCTGAGGGGGGTGTCAAGCTGG 660
QY 661 GGGCGAGGGCTGTGCGCAGCCCAACCGGCTGTGCACTTACACCCGTGTCACTTACTTGG 720
DB 661 GGGCGAGGGCTGTGCGCAGCCCAACCGGCTGTGCACTTACACCCGTGTCACTTACTTGG 720
QY 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
DB 721 GACTGATCCACCACTATGTCCCAAAAAGCCGTGAAGCGGCGCGCTGT 771
```

```
RESULT 6
US-09-598-982C-38
; Sequence 38, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendrich, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASINS, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIORITY FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38

Query Match      98.3%; Score 758.2; DB 1; Length 771;
Best Local Similarity 99.0%; Pred. No. 0.041;
Matches 763; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCAGAGCAATGGCCCTGG 60
DB 1 GGGCCCCCTCGAGAAAAGATGTCGGGGGTCAAGAGGCCCCCAGAGCAATGGCCCTGG 60
QY 61 CAGGTGAGCTGAGAGTCCAGGCCCATACTGATGCACTTCTGGGGGGGCTCCCTCATC 120
DB 61 CAGGTGAGCTGAGAGTCCAGGCCCATACTGATGCACTTCTGGGGGGGCTCCCTCATC 120
QY 121 CACCCCGAGTGGGTCTGACCGCAGCGCATGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
DB 121 CACCCCGAGTGGGTCTGACCGCAGCGCATGCGTGGAGCCGGAAGTCAAGATCTGGCC 180
QY 181 GCCCTCAGGGTGCACCTCGGGAGAGACCTCTAACAAGACAGCTGCTGCGGTC 240
DB 181 GCCCTCAGGGTGCACCTCGGGAGAGACCTCTAACAAGACAGCTGCTGCGGTC 240
QY 241 AGCAGATCATCTGTCACCCACAGTTCTACACCGCCGAGTCGAGCGGAGCATGSCCTG 300
DB 241 AGCAGATCATCTGTCACCCACAGTTCTACACCGCCGAGTCGAGCGGAGCATGSCCTG 300
QY 301 CTGAGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCACACGAGTCACTGCCCCCT 360
DB 301 CTGAGAGCTGAGAGAGCCGGTGAACGTCTCAGCCACGTCACACGAGTCACTGCCCCCT 360
QY 361 GCCTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
DB 361 GCCTCAGAGACCTTCCCCCGGGAGATGCGTGTGGGTCACTGGCTGGGGCGATGTGAC 420
QY 421 AATGATAGGCGCTCCCAACCGCCATTTCTGTAAGAGGTGAAGTCCCATATGAGAA 480
DB 421 AATGATAGGCGCTCCCAACCGCCATTTCTGTAAGAGGTGAAGTCCCATATGAGAA 480
QY 481 AACCAATTGTGACGCAAAATATACACCTTGCGCTACACGAGAGACAGTCCGACATC 540
DB 481 AACCAATTGTGACGCAAAATATACACCTTGCGCTACACGAGAGACAGTCCGACATC 540
QY 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCAAGGCGACATCC 600
DB 541 GTCCGTGACGACATGCTGTGTGCGGGAAACCCGAGAGGACTATGCAAGGCGACATCC 600
QY 601 GGGCGACCACTGTGTGTGCAAGGTGAATGGCACTGGCTGAGGGGGGTGTCAAGCTGG 660
DB 601 GGGCGACCACTGTGTGTGCAAGGTGAATGGCACTGGCTGAGGGGGGTGTCAAGCTGG 660
```

[illegible]

RESULT 7  
US-09-598-982C-22

```

Sequence 22: Application US/09598982C
GENERAL INFORMATION:
APPLICANT: Niles, Andrew
APPLICANT: Maffitt, Mark
APPLICANT: Haak-Frendescho, Mary
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF
TITLE OF INVENTION: AND METHODS OF MAKING SAME
FILE REFERENCE: 34506.104
CURRENT APPLICATION NUMBER: US/09/598,982C
CURRENT FILING DATE: 2000-06-21
PRIORITY APPLICATION NUMBER: 09/079,970
PRIORITY FILING DATE: 1998-04-15
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PatentIn version 3.3
SEQ ID NO 22
LENGTH: 771
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (7)..(753)
US-09-598-982C-22

```

Query Match	98.1%	Score 756.6;	DB 1;	Length 771;
Best Local Similarly	98.8%	Pred.No. 0.042;		
Matches 762; Conservative	0;	Mismatches	9;	Indels 0; Gaps 0;

QY	1	GGGCCCCCTGAGAAAAGAAATCGTCCGGGGTCAGAGAGGCCCCACAGAACAACTGGCCCTGG	60
Db	1	GGGCCCCCTGAGAAAAGAAATCGTCCGGGGTCAGAGAGGCCCCACAGAACAACTGGCCCTGG	60
QY	61	CAGTGAAGCCTGAGAGTCCACCGGCCCATCTGAAATGACATTCTGCGGGGGCTCCCTCATC	120
Db	61	CAGTGAAGCCTGAGAGTCCACCGGCCCATCTGAAATGACATTCTGCGGGGGCTCCCTCATC	120
QY	121	CACCCCAAGTGGGTGCTGAACCGCAGCGCACTGCGTGGGACCTGACCTGCAAGATCTTGCC	180
Db	121	CACCCCAAGTGGGTGCTGAACCGCAGCGCACTGCGTGGGACCTGCAAGATCTTGACC	180
QY	181	GGCCTCAGGGTGAACCTGCGGGAGGAGACCTCTACTACAGAGACCAAGCTGCTGGCGGTC	240
Db	181	GGCCTCAGGGTGAACCTGCGGGAGGAGACCTCTACTACAGAGACCAAGCTGCTGGCGGTC	240
QY	241	AGCAGATCATCGTGCACCCACAGTCTTACAACCGCCAGATCGGAGGGGACATCGCCCTG	300
Db	241	AGCAGATCATCGTGCACCCACAGTCTTACAACCGCCAGATCGGAGGGGCAATGCCCTG	300
QY	301	CTGGAAGCTGAGAGACCGGTGAACGCTCTCAAGCCAGTCCACACGGTCAACCTTGCCCCCT	360
Db	301	CTGGAAGCTGAGAGACCGGTGAACGCTCTCAAGCCAGTCCACACGGTCAACCTTGCCCCCT	360
QY	361	GCCTGAGAGACCTTCCCCCGGGGAAAGCCGATGGGCTCACTGGCTGGGGGGAATGGAG	420
Db	361	GCCTGAGAGACCTTCCCCCGGGGAAAGCCGATGGGCTCACTGGCTGGGGGGAATGGAG	420
QY	421	AATGATGAGCGCTCCACACGCCATTCTCTGAAAGCAGTGAAGTCCCATATATGAA	480
Db	421	AATGATGAGCGCTCCACACGCCATTCTCTGAAAGCAGTGAAGTCCCATATATGAA	480
QY	481	AACCAATTGTGACGCAAAATATCAACTTGGCGCTTACACGGGAGACGAGTCCGATC	540

Accession	Sequence	Position
Dd	AAACCAATTGTGACGCAAAATACCACTTGGCGCTACACGGAGACGACGTCGGCATT	540
Qy	GTCCGTGACGACATGCTGTGTGTCGGGGAAACACCCGGAGGAATCATGCCAAGAGACGCC	600
Dd	GTCCGTGACGACATGCTGTGTGTCGGGGAAACCCGGAGGAATCATGCGCAGGGCGACTCC	600
Qy	GGCCGACCACTGTGTGTGCAAGGTGAATGGCACTGGCTGCAAGCGGGCGGTGTCAACTGG	660
Dd	GGAGGGCCCCGTGTGTGCAAGGTGAATGGCACTGGCTGCAAGCGGGCGGTGTCAACTGG	660
Qy	GGCGAGGGCTGTGCCACGCCCAACCGGCGCTGGCATCTACACCGGTGTCACTTACTTGG	720
Dd	GGCGAGGGCTGTGCCACGCCCAACCGGCGCTGGCATCTACACCGGTGTCACTTACTTGG	720
Qy	GACTGGATTCACACTATGTATCCCAAAAAAGCGGTAAAGGGCGCGCGCTGTGT	771
Dd	GACTGGATTCACACTATGTATCCCAAAAAAGCGGTAAAGGGCGCGCGCTGTGT	771

RESULT 8  
US-09-59

```

: Sequence 36 Application US/09598982C
: GENERAL INFORMATION:
: APPLICANT: Niles, Andrew
: APPLICANT: Maffitt, Mark
: APPLICANT: Haak-Frendscho, Mary
: TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINASES, ACTIVE SITE MUTANTS THEREOF
: TITLE OF INVENTION: AND METHODS OF MAKING SAME
: FILE REFERENCE: 34506.104
: CURRENT APPLICATION NUMBER: US/09/598,982C
: CURRENT FILING DATE: 2000-06-21
: PRIOR APPLICATION NUMBER: 09/079,970
: PRIOR FILING DATE: 1998-04-15
: NUMBER OF SEQ ID NOS: 52
: SOFTWARE: PatentIn version 3.3
: SEQ ID NO 36
: LENGTH: 771
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: CDS
: LOCATION: (7)..(753)
: US-09-598-982C-36

```

Query Match	97.9%	Score 755	DB 1	Length 771
Best Local Similarly	98.7%	Pred. No. 0.042		
Matches 761		Conservative 0	Mismatches 10	Indels 0
			Gaps	0

QY	1	GGGCCCCCTGAGAAAAGAAATGTCGGGGGGTCAAGAGAGCCCCAGGAGCAATGGCCCTGG	60
Db	1	GGGCCCCCTGAGAAAAGAAATGTCGGGGGGTCAAGAGAGCCCCAGGAGCAATGGCCCTGG	60
QY	61	CAGGTGAGCTGAGAGTCCACGGCCCACTAGTAGTCACTTCTGCGGGGGCTCCCTATC	120
Db	61	CAGGTGAGCTGAGAGTCCACGGCCCACTAGTAGTCACTTCTGCGGGGGCTCCCTATC	120
QY	121	CACCCCCAGTGGGTGCTGACCGCAGCGCACTGCGTGGACCGGACGTCAAGATCTGGCC	180
Db	121	CACCCCCAGTGGGTGCTGACCGCGCGCGGTGCGTGGACCGGACGTCAAGATCTGGCC	180
QY	181	GCCTTCAGGGTGTCAACTCGGGAGGACGACCTCTTACTACAGAACCACTGTCGCCGTTC	240
Db	181	GCCTTCAGGGTGTCAACTCGGGAGGACGACCTCTTACTACAGAACCACTGTCGCCGTTC	240
QY	241	AGCAGGAATCATGTGTGSCAACCCACAGTTCTAACACCGCGCGCATGTGGAGCGGACATTCGCCCTG	300
Db	241	AGCAGGAATCATGTGTGSCAACCCACAGTTCTAACACCGCGCGCATGTGGAGCGGACATTCGCCCTG	300
QY	301	CTGGAGCTGAGAGAGCCGGTGAACGTCTTCCAGCCACGTTCACACAGTACCCCTGCCCTT	360
Db	301	CTGGAGCTGAGAGAGCCGGTGAACGTCTTCCAGCCACGTTCACACAGTACCCCTGCCCTT	360
QY	361	GCCTTCAGAGACTTCCCCCGGGAGTGCCTGTGGGTCACTGGCTGGGGCGATGTGAC	420



```
QY 139 ACCGAGCGCACTGCGTGAGGACCGGACGTCAAGATCTTGCCGCCCTCAAGGGTGCACACTG 198
DB 121 ACCGAGCGCACTGCGTGAGGACCGGACGTCAAGATCTTGCCGCCCTCAAGGGTGCACACTG 180
QY 199 CGGAGGACGACACTCTTACTACCAAGACCAAGCTGCTGCCGCTAGAGAGATCATCTGTGAC 258
DB 181 CGGAGGACGACACTCTTACTACCAAGACCAAGCTGCTGCCGCTAGAGATCATCTGTGAC 240
QY 259 CCACAGTTCTACACCGCCAGATCGGAGGAGCATCGCCCTCTGAGAGTGGAGAGGCG 318
DB 241 CCACAGTTCTACACCGCCAGATCGGAGGAGCATCGCCCTCTGAGAGTGGAGAGGCG 300
QY 319 GTGAACGTCTCCAGCAGCTCCACACGCTCACCTGCCCTCTGCTCAGAGACCTTCCCG 378
DB 301 GTGAAGGTCTCCAGCAGCTCCACACGCTCACCTGCCCTCTGCTCAGAGACCTTCCCG 360
QY 379 CGGAGGATGCCGTGCTGAGTCACTGAGCTGGGGGAGATGTGAGACATGATGAGCGCTCCCA 438
DB 361 CGGAGGATGCCGTGCTGAGTCACTGAGCTGGGGGAGATGTGAGACATGATGAGCGCTCCCA 420
QY 439 CGGCATTTCCTCTGAAGAGGTGAAGGTCCCATTAATGGAACACATTGTAAGCA 498
DB 421 CGGCATTTCCTCTGAAGAGGTGAAGGTCCCATTAATGGAACACATTGTAAGCA 480
QY 499 AATAACACCTTGGCGCTTACACGGGAGACGACGTCCGATGCTCCGTGACGACATGCTG 558
DB 481 AATAACACCTTGGCGCTTACACGGGAGACGACGTCCGATGCTCCGTGACGACATGCTG 540
QY 559 TGTGCGGGGAGAACCCCGAGGGACTCATGCCAGAGAGACGCCGGGAGACATGCTGTGTC 618
DB 541 TGTGCGGGGAGAACCCCGAGGGACTCATGCCAGAGAGACGCCGGGAGACATGCTGTGTC 600
QY 619 AAGTGAATGACACCTGCTGAGGCGGGCGTGTCACTGAGTGGGGGAGGGGCTGTGCCAG 678
DB 601 AAGTGAATGACACCTGCTGAGGCGGGCGTGTCACTGAGTGGGGGAGGGGCTGTGCCAG 660
QY 679 CCACACCGGCTGGGATCTACACCCGTGTACCTTACTTGAATGATCCACCACTAT 738
DB 661 CCACACCGGCTGGGATCTACACCCGTGTCACTTACTTGAATGATCCACCACTAT 720
QY 739 GTCCCCAAAAAGCCG 753
DB 721 GTCCCCAAAAAGCCG 735
```

RESULT 11  
US-09-598-982C-8/c

```
/ Sequence 8, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Maffitt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR FILING DATE: 1998-04-15
/ PRIOR APPLICATION NUMBER: 09/079,970
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 8
/ LENGTH: 771
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (7)..(753)
US-09-598-982C-8
```

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;

```
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
QY 1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAGAGAGGCCCCAGAGCAAGTGGCCCTGG 60
DB 113 GAGCCCCCGAGAAAGTGCATCAGATGAGGCGCGTGAATCTTCAGGCTCACCTGCCAGGGC 54
QY 61 CAGGTGACCTGAGAGATTCACGCGCCCATACTGATGACACTTCTCGGGGGGCTC 113
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATCTTTTCTGAGGGGCCC 1
```

RESULT 12  
US-09-598-982C-20/c

```
/ Sequence 20, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Maffitt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR FILING DATE: 1998-04-15
/ PRIOR APPLICATION NUMBER: 09/079,970
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 20
/ LENGTH: 771
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (7)..(753)
US-09-598-982C-20
```

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```
QY 1 GGGCCCCCTCGAAGAAAGATGTCGGGGGTCAGAGAGGCCCCAGAGCAAGTGGCCCTGG 60
DB 113 GAGCCCCCGAGAAAGTGCATCAGATGAGGCGCGTGAATCTTCAGGCTCACCTGCCAGGGC 54
QY 61 CAGGTGACCTGAGAGATTCACGCGCCCATACTGATGACACTTCTCGGGGGGCTC 113
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATCTTTTCTGAGGGGCCC 1
```

RESULT 13

US-09-598-982C-22/c

```
/ Sequence 22, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Maffitt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR FILING DATE: 1998-04-15
/ PRIOR APPLICATION NUMBER: 09/079,970
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 22
/ LENGTH: 771
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (7)..(753)
US-09-598-982C-22
```

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGATATGGCCGTCGACTCTCAGGCTCACCCTGCAGGGC 54  
DB 53 CACTTGCTCTGGGGGCTCCTGACCCCGACGATTTCTTTCTGAGGGGCC 1

## RESULT 14

US-09-598-982C-24/C  
Sequence 24, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 24  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-24

Query Match

Best Local Similarity 3.7%; Score 28.2; DB 1; Length 771;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGATATGGCCGTCGACTCTCAGGCTCACCCTGCAGGGC 54  
QY 61 CAGGTGAGCCTGAGAGTCCAGGCCCATATGATGCACTTCTGCGGGGGCTC 113  
DB 53 CACTTGCTCTGGGGGCTCCTGACCCCGACGATTTCTTTCTGAGGGGCC 1

## RESULT 15

US-09-598-982C-26/C  
Sequence 26, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 26  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:

NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-26

Query Match 3.7%; Score 28.2; DB 1; Length 771;  
Best Local Similarity 53.1%; Pred. No. 17;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGATATGGCCGTCGACTCTCAGGCTCACCCTGCAGGGC 54  
DB 53 CACTTGCTCTGGGGGCTCCTGACCCCGACGATTTCTTTCTGAGGGGCC 1

## RESULT 16

US-09-598-982C-36/C  
Sequence 36, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 36  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (7)..(753)  
US-09-598-982C-36

Query Match

Best Local Similarity 3.7%; Score 28.2; DB 1; Length 771;  
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 GGGCCCTCGAGAAAGATGTCGGGGGTGAGAGGCCCCCAGAGCAAGTGCCCTGG 60  
DB 113 GAGCCCCCGAGAGTGCATCAGATATGGCCGTCGACTCTCAGGCTCACCCTGCAGGGC 54  
QY 61 CAGGTGAGCCTGAGAGTCCAGGCCCATATGATGCACTTCTGCGGGGGCTC 113  
DB 53 CACTTGCTCTGGGGGCTCCTGACCCCGACGATTTCTTTCTGAGGGGCC 1

## RESULT 17

US-09-598-982C-38/C  
Sequence 38, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 38  
LENGTH: 771

US-09-598-982C-26/C  
Sequence 26, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 26  
LENGTH: 771  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:

US-09-598-982C-38/C  
Sequence 38, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 38  
LENGTH: 771

```

; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-38
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCCCTCGAGAAAAGATCTCGGGGCTCAGAGGCCCCCAGAGCAAGTGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTGATCCAGTATGGCCGTGACTCTCAGGCTCACTGCCAGGGC 54
    |||||
QY 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1
    |||||
```

```
RESULT 18
US-09-598-982C-40/c
```

```

; Sequence 40, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-40
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCCCTCGAGAAAAGATCTCGGGGCTCAGAGGCCCCCAGAGCAAGTGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTGATCCAGTATGGCCGTGACTCTCAGGCTCACTGCCAGGGC 54
    |||||
QY 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1
    |||||
```

```
RESULT 19
US-09-598-982C-42/c
```

```

; Sequence 42, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
```

```

; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 42
; LENGTH: 771
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7)..(753)
US-09-598-982C-42
```

```
Query Match          3.7%; Score 28.2; DB 1; Length 771;
Best Local Similarity 53.1%; Pred. No. 17;
Matches 60; Conservative 0; Mismatches 53; Indels 0; Gaps 0;
```

```
QY 1 GGGCCCCCTCGAGAAAAGATCTCGGGGCTCAGAGGCCCCCAGAGCAAGTGCCCTGG 60
    |||||
DB 113 GAGCCCCCGAGAAAGTGATCCAGTATGGCCGTGACTCTCAGGCTCACTGCCAGGGC 54
    |||||
QY 61 CAGGTGAGCTTGAGAGTCCAGCGCCCATCTGATGCACTTCTGCGGGGCTC 113
    |||||
DB 53 CACTTGCTCTGGGGGCTCTCTGACCCCGACGATTTCTTCTCGAGGGGGCCC 1
    |||||
```

```
RESULT 20
US-09-598-982C-10/c
```

```

; Sequence 10, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(735)
US-09-598-982C-10
```

```
Query Match          3.3%; Score 25.6; DB 1; Length 735;
Best Local Similarity 52.4%; Pred. No. 18;
Matches 99; Conservative 0; Mismatches 84; Indels 6; Gaps 2;
```

```
QY 286 GGGACATGCGCCCTCTGAGGTGAGAGCCGGTGAAGTCTCTCAGACGATGCCACACG 345
    |||||
DB 453 GGGACCTTCACTGCTCTTCAAGAGAAATGGCGGTGAGAGGGCTCATATGTCCACA-- 396
    |||||
QY 346 GTCAACCTGCCCCCTGCTCAAGACCTTCCCCCGGGGATGCGTGTGGTCACTGGC 405
    |||||
DB 395 -TGGCCAGCAAGTACAGACGACGACGCGATCCCCGGGGGAAAGTCTCTGAGGCGAGGGG 337
    |||||
QY 406 TGGGGCGA---TGTGAACAATGATGAGCGCTTCCACCGCCATTTCTCTGAAGAGGTG 462
    |||||
DB 336 CAGGGTGAACGGTGTGAGCTGTGAGAGCTTCAACCGGCTTCTTCAAGCTCCAGAGGGC 277
    |||||
QY 463 AAGGTCCCC 471
    |||||
DB 276 GATGTCCG 268
    |||||
```

```
Search completed: August 26, 2005, 12:32:37
Job time : 3.81314 secs
```



GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
(without alignments)  
6.180 Million cell updates/sec

Title: US-09-598-982C-9  
Perfect score: 1397  
Sequence: 1 LEKRIVGQGEAPRSKMPQV.....IYTRVTVYLDWIHHVPPKP 249

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 10 seqs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1397	100.0	249	1	US-09-598-982C-9
2	1394	99.8	249	1	US-09-598-982C-25
3	1394	99.8	249	1	US-09-598-982C-27
4	1389	99.4	249	1	US-09-598-982C-23
5	1389	99.4	249	1	US-09-598-982C-41
6	1389	99.4	249	1	US-09-598-982C-43
7	1387	99.3	249	1	US-09-598-982C-21
8	1384	98.9	249	1	US-09-598-982C-39
9	1382	98.9	249	1	US-09-598-982C-37
10	1378	98.6	245	1	US-09-598-982C-11

## ALIGNMENTS

RESULT 1  
US-09-598-982C-9  
Sequence 9, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 9  
LENGTH: 249

TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-9

Query Match 100.0%; Score 1397; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKAAL 60
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKAAL 60
QY 61 RVQLREQLHYQDQLLPVSRILIVHPQFYTAQIGADIALBLEBEPVKVSSHVHTVTLPPAS 120
DB 61 RVQLREQLHYQDQLLPVSRILIVHPQFYTAQIGADIALBLEBEPVKVSSHVHTVTLPPAS 120
QY 121 ETFPFGMPCWVTGMDVNDERLPPPLKQVKPIINENHICDAKYHLAGATGDDVIR 180
DB 121 ETFPFGMPCWVTGMDVNDERLPPPLKQVKPIINENHICDAKYHLAGATGDDVIR 180
QY 181 DDMLCAGNTRDSCQSGDGGPLVCKVNGTWLQAGVSMGSCAQPNNRPGIYTRYTLIDW 240
DB 181 DDMLCAGNTRDSCQSGDGGPLVCKVNGTWLQAGVSMGSCAQPNNRPGIYTRYTLIDW 240
QY 241 IHHYVPPKP 249
DB 241 IHHYVPPKP 249
```

RESULT 2  
US-09-598-982C-25

Sequence 25, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendscho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

TITLE OF INVENTION: AND METHODS OF MAKING SAME

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

PRIOR FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 25

LENGTH: 249

TYPE: PRT

ORGANISM: Homo sapiens

US-09-598-982C-25

Query Match 99.8%; Score 1394; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKAAL 60
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKAAL 60
QY 61 RVQLREQLHYQDQLLPVSRILIVHPQFYTAQIGADIALBLEBEPVKVSSHVHTVTLPPAS 120
DB 61 RVQLREQLHYQDQLLPVSRILIVHPQFYTAQIGADIALBLEBEPVKVSSHVHTVTLPPAS 120
QY 121 ETFPFGMPCWVTGMDVNDERLPPPLKQVKPIINENHICDAKYHLAGATGDDVIR 180
DB 121 ETFPFGMPCWVTGMDVNDERLPPPLKQVKPIINENHICDAKYHLAGATGDDVIR 180
QY 181 DDMLCAGNTRDSCQSGDGGPLVCKVNGTWLQAGVSMGSCAQPNNRPGIYTRYTLIDW 240
DB 181 DDMLCAGNTRDSCQSGDGGPLVCKVNGTWLQAGVSMGSCAQPNNRPGIYTRYTLIDW 240
QY 241 IHHYVPPKP 249
DB 241 IHHYVPPKP 249
```

Db 241 IHHYVPKKP 249

RESULT 3

US-09-598-982C-27  
; Sequence 27, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 27  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-27

Query Match 99.8%; Score 1394; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
QY 61 RVQLREOHLYYODQLLPVSRIIVHQPFTYTAQIGADIALLEBEPVKSSSHVTYTLPPAS 120  
Db 61 RVQLREOHLYYODQLLPVSRIIVHQPFTYTAQIGADIALLEBEPVKSSSHVTYTLPPAS 120  
QY 121 ETPPGMPCWVTGWDVNDRLPPFPPLKQVYPIIMENHI CDAKYHLGAYTGDDVRIYR 180  
Db 121 ETPPGMPCWVTGWDVNDRLPPFPPLKQVYPIIMENHI CDAKYHLGAYTGDDVRIYR 180  
QY 181 DDMLCAGNTRRDS CGDGGPLVCKVNGTWLQAGVSWGEGCAQPNRPGITRYTYIYLDW 240  
Db 181 DDMLCAGNTRRDS CGDGGPLVCKVNGTWLQAGVSWGEGCAQPNRPGITRYTYIYLDW 240  
QY 241 IHHYVPKKP 249  
Db 241 IHHYVPKKP 249

RESULT 4

US-09-598-982C-23  
; Sequence 23, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 23  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-23

Query Match 99.4%; Score 1389; DB 1; Length 249;

Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
QY 61 RVQLREOHLYYODQLLPVSRIIVHQPFTYTAQIGADIALLEBEPVKSSSHVTYTLPPAS 120  
Db 61 RVQLREOHLYYODQLLPVSRIIVHQPFTYTAQIGADIALLEBEPVKSSSHVTYTLPPAS 120  
QY 121 ETPPGMPCWVTGWDVNDRLPPFPPLKQVYPIIMENHI CDAKYHLGAYTGDDVRIYR 180  
Db 121 ETPPGMPCWVTGWDVNDRLPPFPPLKQVYPIIMENHI CDAKYHLGAYTGDDVRIYR 180  
QY 181 DDMLCAGNTRRDS CGDGGPLVCKVNGTWLQAGVSWGEGCAQPNRPGITRYTYIYLDW 240  
Db 181 DDMLCAGNTRRDS CGDGGPLVCKVNGTWLQAGVSWGEGCAQPNRPGITRYTYIYLDW 240  
QY 241 IHHYVPKKP 249  
Db 241 IHHYVPKKP 249

RESULT 5

US-09-598-982C-41  
; Sequence 41, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: Patentin version 3.3  
; SEQ ID NO 41  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-41

Query Match 99.4%; Score 1389; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
QY 61 RVQLREOHLYYODQLLPVSRIIVHQPFTYTAQIGADIALLEBEPVKSSSHVTYTLPPAS 120  
Db 61 RVQLREOHLYYODQLLPVSRIIVHQPFTYTAQIGADIALLEBEPVKSSSHVTYTLPPAS 120  
QY 121 ETPPGMPCWVTGWDVNDRLPPFPPLKQVYPIIMENHI CDAKYHLGAYTGDDVRIYR 180  
Db 121 ETPPGMPCWVTGWDVNDRLPPFPPLKQVYPIIMENHI CDAKYHLGAYTGDDVRIYR 180  
QY 181 DDMLCAGNTRRDS CGDGGPLVCKVNGTWLQAGVSWGEGCAQPNRPGITRYTYIYLDW 240  
Db 181 DDMLCAGNTRRDS CGDGGPLVCKVNGTWLQAGVSWGEGCAQPNRPGITRYTYIYLDW 240  
QY 241 IHHYVPKKP 249  
Db 241 IHHYVPKKP 249

RESULT 6

US-09-598-982C-43

```
; Sequence 43, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 43
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-43
```

Query Match 99.4%; Score 1389; DB 1; Length 249;

Best Local Similarity 99.2%; Pred. No. 0;

Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Oy 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Oy 61 RVQUREQHLYYODQLPVSRILVHPQYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120
Db 61 RVQUREQHLYYODQLPVSRILVHPQYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120
Oy 121 ETPPPGMCWVTGWDVNDERLPPPPPLKQVPIIMENHICDAKYLGAATGDDVRI 180
Db 121 ETPPPGMCWVTGWDVNDERLPPPPPLKQVPIIMENHICDAKYLGAATGDDVRI 180
Oy 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYTL 240
Db 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYTL 240
Oy 241 IHHVYPPKP 249
Db 241 IHHVYPPKP 249

RESULT 7
US-09-598-982C-21
; Sequence 21, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 21
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-21
```

Query Match 99.3%; Score 1387; DB 1; Length 249;

Best Local Similarity 99.6%; Pred. No. 0;

Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Oy 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
```

```
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Oy 61 RVQUREQHLYYODQLPVSRILVHPQYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120
Db 61 RVQUREQHLYYODQLPVSRILVHPQYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120
Oy 121 ETPPPGMCWVTGWDVNDERLPPPPPLKQVPIIMENHICDAKYLGAATGDDVRI 180
Db 121 ETPPPGMCWVTGWDVNDERLPPPPPLKQVPIIMENHICDAKYLGAATGDDVRI 180
Oy 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYTL 240
Db 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYTL 240
Oy 241 IHHVYPPKP 249
Db 241 IHHVYPPKP 249
```

#### RESULT 8

US-09-598-982C-39

Sequence 39, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendescho, Mary

TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,

FILE REFERENCE: 34506.104

CURRENT APPLICATION NUMBER: US/09/598,982C

CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970

PRIOR FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 52

SOFTWARE: PatentIn version 3.3

SEQ ID NO 39

LENGTH: 249

TYPE: PRT

ORGANISM: Homo sapiens

US-09-598-982C-39

Query Match 99.1%; Score 1384; DB 1; Length 249;

Best Local Similarity 99.2%; Pred. No. 0;

Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Oy 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Db 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Oy 61 RVQUREQHLYYODQLPVSRILVHPQYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120
Db 61 RVQUREQHLYYODQLPVSRILVHPQYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120
Oy 121 ETPPPGMCWVTGWDVNDERLPPPPPLKQVPIIMENHICDAKYLGAATGDDVRI 180
Db 121 ETPPPGMCWVTGWDVNDERLPPPPPLKQVPIIMENHICDAKYLGAATGDDVRI 180
Oy 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYTL 240
Db 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYTL 240
Oy 241 IHHVYPPKP 249
Db 241 IHHVYPPKP 249
```

#### RESULT 9

US-09-598-982C-37

Sequence 37, Application US/09598982C

GENERAL INFORMATION:

APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark

APPLICANT: Haak-Frendescho, Mary

```

; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 37
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-598-982C-37

Query Match      98.9%; Score 1382; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 LEKRIYGGQAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWLTAAHCVGPDVKDLAAL 60
DB 1 LEKRIYGGQAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWLTAAHCVGPDVKDLAAL 60
QY 61 RVQLRQCHLYYQDQLPVSRITIVHPOFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
DB 61 RVQLRQCHLYYQDQLPVSRITIVHPOFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
QY 121 ETPPPGAPCVMTGMDVNDERLPPPEPLKQVVPIMENHICDAKXHLGAYTGDDVRIYR 180
DB 121 ETPPPGAPCVMTGMDVNDERLPPPEPLKQVVPIMENHICDAKXHLGAYTGDDVRIYR 180
QY 181 DDLWLCAGNTRRDSGQDSGGPLVCVKNGTWLAQGVYSSWEGCAQPNRPGLYTRVYLLDM 240
DB 181 DDLWLCAGNTRRDSGQDSGGPLVCVKNGTWLAQGVYSSWEGCAQPNRPGLYTRVYLLDM 240
QY 241 IHHTYVPRKP 249
DB 241 IHHTYVPRKP 249

RESULT 10
US-09-598-982C-11
; Sequence 11, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maifitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 11
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-598-982C-11

Query Match      98.6%; Score 1378; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 245; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 IVGGQAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWLTAAHCVGPDVKDLAALRVOL 64
DB 1 IVGGQAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWLTAAHCVGPDVKDLAALRVOL 60
QY 65 RRGHLYYQDQLPVSRITIVHPOFYTAQIGADIALLEBEPVYSSHVHTVTLPPASETP 124
DB 61 RRGHLYYQDQLPVSRITIVHPOFYTAQIGADIALLEBEPVYSSHVHTVTLPPASETP 120

```

```

QY 125 PGMPGCVTGWGVDVNDERLPPPEPLKQVVPIMENHICDAKXHLGAYTGDDVRIYRDM 184
DB 121 PGMPGCVTGWGVDVNDERLPPPEPLKQVVPIMENHICDAKXHLGAYTGDDVRIYRDM 180
QY 185 CAGNTRRDSGQDSGGPLVCVKNGTWLAQGVYSSWEGCAQPNRPGLYTRVYLLDMHHY 244
DB 181 CAGNTRRDSGQDSGGPLVCVKNGTWLAQGVYSSWEGCAQPNRPGLYTRVYLLDMHHY 240
QY 245 VPKKP 249
DB 241 VPKKP 245

Search completed: August 26, 2005, 12:29:15
Job time : 1.10016 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.098519 Seconds
(without alignments)
6.180 Million cell updates/sec

Title: US-09-598-982C-11
Perfect score: 1378
Sequence: 1 IVGGQAPRSKMPQVSLRV.....IYTRVYLLDMHHYVPRKP 245

Scoring table:
Gapop 10.0 , Gapext 0.5

Searched: 10 segs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0
Maximum DB seq length: inf

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 200 summaries

Database : US09598982C_rev.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No. Score Query Match Length DB ID Description
-----
1 1378 100.0 245 1 US-09-598-982C-11 Sequence 11, Appl
2 1378 100.0 249 1 US-09-598-982C-9 Sequence 9, Appl
3 1375 99.8 249 1 US-09-598-982C-25 Sequence 25, Appl
4 1375 99.8 249 1 US-09-598-982C-27 Sequence 27, Appl
5 1370 99.4 249 1 US-09-598-982C-23 Sequence 23, Appl
6 1370 99.4 249 1 US-09-598-982C-41 Sequence 41, Appl
7 1370 99.4 249 1 US-09-598-982C-43 Sequence 43, Appl
8 1368 99.3 249 1 US-09-598-982C-21 Sequence 21, Appl
9 1365 99.1 249 1 US-09-598-982C-39 Sequence 39, Appl
10 1363 98.9 249 1 US-09-598-982C-37 Sequence 37, Appl

```

## ALIGNMENTS

RESULT 1  
US-09-598-982C-11

Sequence 11, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 11  
; LENGTH: 245  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-11

Query Match 100.0%; Score 1378; DB 1; Length 245;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 245; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 60  
DB 1 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 60  
QY 61 REQHLYYODQLPVSRIIVHPQFTTAQIGADIALLEBPVKVSSHHTVTLPPASSTFP 120  
DB 61 REQHLYYODQLPVSRIIVHPQFTTAQIGADIALLEBPVKVSSHHTVTLPPASSTFP 120  
QY 121 PGMPCTWTGMDVNDRLPPPPPLKQVKVPIEMNHICDAKYHGAATGDDVRIVRDML 180  
DB 121 PGMPCTWTGMDVNDRLPPPPPLKQVKVPIEMNHICDAKYHGAATGDDVRIVRDML 180  
QY 181 CAGNTRRDS CGDSGGLPVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDMTHY 240  
DB 181 CAGNTRRDS CGDSGGLPVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDMTHY 240  
QY 241 VPKKP 245  
DB 241 VPKKP 245

RESULT 2  
US-09-598-982C-9  
; Sequence 9, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 9  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-9

Query Match 100.0%; Score 1378; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 245; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 60  
DB 1 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 60

DB 5 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 64  
QY 61 REQHLYYODQLPVSRIIVHPQFTTAQIGADIALLEBPVKVSSHHTVTLPPASSTFP 120  
DB 61 REQHLYYODQLPVSRIIVHPQFTTAQIGADIALLEBPVKVSSHHTVTLPPASSTFP 124  
QY 121 PGMPCTWTGMDVNDRLPPPPPLKQVKVPIEMNHICDAKYHGAATGDDVRIVRDML 180  
DB 121 PGMPCTWTGMDVNDRLPPPPPLKQVKVPIEMNHICDAKYHGAATGDDVRIVRDML 184  
QY 181 CAGNTRRDS CGDSGGLPVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDMTHY 240  
DB 181 CAGNTRRDS CGDSGGLPVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDMTHY 244  
QY 241 VPKKP 245  
DB 241 VPKKP 249

RESULT 3  
US-09-598-982C-25  
; Sequence 25, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 25  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-25

Query Match 99.8%; Score 1375; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 244; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 60  
DB 5 IVGGQEARSRKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVVDLALRVQL 64  
QY 61 REQHLYYODQLPVSRIIVHPQFTTAQIGADIALLEBPVKVSSHHTVTLPPASSTFP 120  
DB 61 REQHLYYODQLPVSRIIVHPQFTTAQIGADIALLEBPVKVSSHHTVTLPPASSTFP 124  
QY 121 PGMPCTWTGMDVNDRLPPPPPLKQVKVPIEMNHICDAKYHGAATGDDVRIVRDML 180  
DB 121 PGMPCTWTGMDVNDRLPPPPPLKQVKVPIEMNHICDAKYHGAATGDDVRIVRDML 184  
QY 181 CAGNTRRDS CGDSGGLPVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDMTHY 240  
DB 181 CAGNTRRDS CGDSGGLPVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDMTHY 244  
QY 241 VPKKP 245  
DB 241 VPKKP 249

RESULT 4  
US-09-598-982C-27  
; Sequence 27, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary

```

; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 27
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-27
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Query Match 99.8%; Score 1375; DB 1; Length 249;

Best Local Similarity 99.6%; Pred. No. 0;

Matches 244; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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QY 1 IVGGQAPRSKMPQVSLRVHGPYMMHFCGGSIIHPQWLTAAHCVGPVVDLAALRVQL 60
   |||||
DB 5 IVGGQAPRSKMPQVSLRVHGPYMMHFCGGSIIHPQWLTAAHCVGPVVDLAALRVQL 64
   |||||
QY 61 REQHLVYQDQLPVSRITVHPQFYTAQIGADIALLELEBPVKVSSHVTVTLPASETFP 120
   |||||
DB 65 REQHLVYQDQLPVSRITVHPQFYTAQIGADIALLELEBPVKVSSHVTVTLPASETFP 124
   |||||
QY 121 PGMPCWVTGMGDVNDERLPPFPFLKQVKVPIEMNHICDAKYHLGAYTGDDVRIVRDML 180
   |||||
DB 125 PGMPCWVTGMGDVNDERLPPFPFLKQVKVPIEMNHICDAKYHLGAYTGDDVRIVRDML 184
   |||||
QY 181 CAGNTRRDSGQDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMIHNY 240
   |||||
DB 185 CAGNTRRDSGQDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMIHNY 244
   |||||
QY 241 VPKKP 245
   |||||
DB 245 VPKKP 249
   |||||
```

## RESULT 5

```

US-09-598-982C-23
; Sequence 23, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 23
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-23
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Query Match 99.4%; Score 1370; DB 1; Length 249;

Best Local Similarity 99.6%; Pred. No. 0;

Matches 244; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 IVGGQAPRSKMPQVSLRVHGPYMMHFCGGSIIHPQWLTAAHCVGPVVDLAALRVQL 60
   |||||
DB 5 IVGGQAPRSKMPQVSLRVHGPYMMHFCGGSIIHPQWLTAAHCVGPVVDLAALRVQL 64
   |||||
QY 61 REQHLVYQDQLPVSRITVHPQFYTAQIGADIALLELEBPVKVSSHVTVTLPASETFP 120
   |||||
DB 65 REQHLVYQDQLPVSRITVHPQFYTAQIGADIALLELEBPVKVSSHVTVTLPASETFP 124
   |||||
```

```

QY 121 PGMPCWVTGMGDVNDERLPPFPFLKQVKVPIEMNHICDAKYHLGAYTGDDVRIVRDML 180
   |||||
DB 125 PGMPCWVTGMGDVNDERLPPFPFLKQVKVPIEMNHICDAKYHLGAYTGDDVRIVRDML 184
   |||||
QY 181 CAGNTRRDSGQDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMIHNY 240
   |||||
DB 185 CAGNTRRDSGQDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMIHNY 244
   |||||
QY 241 VPKKP 245
   |||||
DB 245 VPKKP 249
   |||||
```

## RESULT 6

```

US-09-598-982C-41
; Sequence 41, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 41
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-41
```

Query Match 99.4%; Score 1370; DB 1; Length 249;

Best Local Similarity 99.2%; Pred. No. 0;

Matches 243; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 IVGGQAPRSKMPQVSLRVHGPYMMHFCGGSIIHPQWLTAAHCVGPVVDLAALRVQL 60
   |||||
DB 5 IVGGQAPRSKMPQVSLRVHGPYMMHFCGGSIIHPQWLTAAHCVGPVVDLAALRVQL 64
   |||||
QY 61 REQHLVYQDQLPVSRITVHPQFYTAQIGADIALLELEBPVKVSSHVTVTLPASETFP 120
   |||||
DB 65 REQHLVYQDQLPVSRITVHPQFYTAQIGADIALLELEBPVNVSSHVTVTLPASETFP 124
   |||||
QY 121 PGMPCWVTGMGDVNDERLPPFPFLKQVKVPIEMNHICDAKYHLGAYTGDDVRIVRDML 180
   |||||
DB 125 PGMPCWVTGMGDVNDERLPPFPFLKQVKVPIEMNHICDAKYHLGAYTGDDVRIVRDML 184
   |||||
QY 181 CAGNTRRDSGQDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMIHNY 240
   |||||
DB 185 CAGNTRRDSGQDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMIHNY 244
   |||||
QY 241 VPKKP 245
   |||||
DB 245 VPKKP 249
   |||||
```

## RESULT 7

```

US-09-598-982C-43
; Sequence 43, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
```

PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 43  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-43

Query Match 99.4%; Score 1370; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 243; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 IVGGGEARSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVVDLALRVQL 60  
DB 5 IVGGGEARSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVVDLALRVQL 64  
QY 61 REQHLYYODQLPVSRITVHPQFYTAQIGADIALLEBEPVVSHTVTLLPPASETFP 120  
DB 65 REQHLYYODQLPVSRITVHPQFYTAQIGADIALLEBEPVVSHTVTLLPPASETFP 124  
QY 121 PGMPCWVTGMDVNDERLPPFPPLKQVPIIMENHICDAKYLGAATGDDVRIVRDML 180  
DB 125 PGMPCWVTGMDVNDERLPPFPPLKQVPIIMENHICDAKYLGAATGDDVRIVRDML 184  
QY 181 CAGNTRDSCQDSGGPLVCVKNGTWLOAGVSWGEGCAQPNRPGIYTRYIYLDWIHHY 240  
DB 185 CAGNTRDSCQDSGGPLVCVKNGTWLOAGVSWGEGCAQPNRPGIYTRYIYLDWIHHY 244  
QY 241 VPKKP 245  
DB 245 VPKKP 249

RESULT 8  
US-09-598-982C-21  
Sequence 21, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 21  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-21

Query Match 99.3%; Score 1368; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 244; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 IVGGGEARSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVVDLALRVQL 60  
DB 5 IVGGGEARSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVVDLALRVQL 64  
QY 61 REQHLYYODQLPVSRITVHPQFYTAQIGADIALLEBEPVVSHTVTLLPPASETFP 120  
DB 65 REQHLYYODQLPVSRITVHPQFYTAQIGADIALLEBEPVVSHTVTLLPPASETFP 124  
QY 121 PGMPCWVTGMDVNDERLPPFPPLKQVPIIMENHICDAKYLGAATGDDVRIVRDML 180  
DB 125 PGMPCWVTGMDVNDERLPPFPPLKQVPIIMENHICDAKYLGAATGDDVRIVRDML 184

QY 181 CAGNTRDSCQDSGGPLVCVKNGTWLOAGVSWGEGCAQPNRPGIYTRYIYLDWIHHY 240  
DB 185 CAGNTRDSCQDSGGPLVCVKNGTWLOAGVSWGEGCAQPNRPGIYTRYIYLDWIHHY 244  
QY 241 VPKKP 245  
DB 245 VPKKP 249

RESULT 9  
US-09-598-982C-39  
Sequence 39, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 39  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-39

Query Match 99.1%; Score 1365; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 243; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 IVGGGEARSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVVDLALRVQL 60  
DB 5 IVGGGEARSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVVDLALRVQL 64  
QY 61 REQHLYYODQLPVSRITVHPQFYTAQIGADIALLEBEPVVSHTVTLLPPASETFP 120  
DB 65 REQHLYYODQLPVSRITVHPQFYTAQIGADIALLEBEPVVSHTVTLLPPASETFP 124  
QY 121 PGMPCWVTGMDVNDERLPPFPPLKQVPIIMENHICDAKYLGAATGDDVRIVRDML 180  
DB 125 PGMPCWVTGMDVNDERLPPFPPLKQVPIIMENHICDAKYLGAATGDDVRIVRDML 184  
QY 181 CAGNTRDSCQDSGGPLVCVKNGTWLOAGVSWGEGCAQPNRPGIYTRYIYLDWIHHY 240  
DB 185 CAGNTRDSCQDSGGPLVCVKNGTWLOAGVSWGEGCAQPNRPGIYTRYIYLDWIHHY 244  
QY 241 VPKKP 245  
DB 245 VPKKP 249

RESULT 10  
US-09-598-982C-37  
Sequence 37, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 37



LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-37

Query Match 98.9%; Score 1363; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 243; Conservativity 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 IVGGQAPRSKMPQVSLRVHGPYMHFGGSLIHPQWLTAAACGPDVKDLAALRYQL 60  
DB 5 IVGGQAPRSKMPQVSLRVHGPYMHFGGSLIHPQWLTAAACGPDVKDLAALRYQL 64  
QY 61 REQHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBPVKVSSHHTVTLPPASETPP 120  
DB 65 REQHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBPVNVSSHHTVTLPPASETPP 124  
QY 121 PGMPICWVTGWDVNDERLPPPLKQVKVPIIMENHICDAKYLGAAYTGDVRIYDDML 180  
DB 125 PGMPICWVTGWDVNDERLPPPLKQVKVPIIMENHICDAKYLGAAYTGDVRIYDDML 184  
QY 181 CAGNTRDSCGDSGGLVCKVNGTWLQAGVSWGSCAOPNRPGIYTRVYLYLDMTHY 240  
DB 185 CAGNTRDSCGDSGGLVCKVNGTWLQAGVSWGSCAOPNRPGIYTRVYLYLDMTHY 244  
QY 241 VPKKP 245  
DB 245 VPKKP 249

Search completed: August 26, 2005, 12:29:15  
Job time : 0.0985519 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model  
Run on: August 26, 2005, 12:29:12 ; Search time 0.10061 Seconds  
(without alignments)  
6.180 Million cell updates/sec

Title: US-09-598-982C-21  
Perfect score: 1393  
Sequence: 1 LEKRIVGQGEAPRSKMPQV.....IYTRVYLYLDMTHYVPKKP 249

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5  
Searched: 10 segs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	1393	100.0	249	1	US-09-598-982C-21

2	1388	99.6	249	1	US-09-598-982C-37	Sequence 37, Appl
3	1387	99.6	249	1	US-09-598-982C-9	Sequence 9, Appl1
4	1384	99.4	249	1	US-09-598-982C-25	Sequence 25, Appl1
5	1384	99.4	249	1	US-09-598-982C-27	Sequence 27, Appl1
6	1379	99.0	249	1	US-09-598-982C-23	Sequence 23, Appl1
7	1379	99.0	249	1	US-09-598-982C-41	Sequence 41, Appl1
8	1379	99.0	249	1	US-09-598-982C-43	Sequence 43, Appl1
9	1374	98.6	249	1	US-09-598-982C-39	Sequence 39, Appl1
10	1368	98.2	245	1	US-09-598-982C-11	Sequence 11, Appl1

## ALIGNMENTS

RESULT 1  
US-09-598-982C-21  
Sequence 21, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598, 982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079, 970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 21  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-21

Query Match 100.0%; Score 1393; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservativity 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFGGSLIHPQWLTAAACGPDVKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFGGSLIHPQWLTAAACGPDVKDLAAL 60  
QY 61 RVQLREQLHYQDQLPVSRIIVHPQFYTAQIGADIALLEBPVKVSSHHTVTLPPAS 120  
DB 61 RVQLREQLHYQDQLPVSRIIVHPQFYTAQIGADIALLEBPVKVSSHHTVTLPPAS 120  
QY 121 ETPPGMPICWVTGWDVNDERLPPPLKQVKVPIIMENHICDAKYLGAAYTGDVRIY 180  
DB 121 ETPPGMPICWVTGWDVNDERLPPPLKQVKVPIIMENHICDAKYLGAAYTGDVRIY 180  
QY 181 DDMLCAGNTRDSCGDSGGLVCKVNGTWLQAGVSWGSCAOPNRPGIYTRVYLYLDM 240  
DB 181 DDMLCAGNTRDSCGDSGGLVCKVNGTWLQAGVSWGSCAOPNRPGIYTRVYLYLDM 240  
QY 241 IHHYVPKKP 249  
DB 241 IHHYVPKKP 249

RESULT 2  
US-09-598-982C-37  
Sequence 37, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendscho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSINS, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598, 982C  
CURRENT FILING DATE: 2000-06-21

PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 37  
 LENGTH: 249  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-598-982C-37

Query Match 99.6%; Score 1388; DB 1; Length 249;  
 Best Local Similarity 99.6%; Pred. No. 0;  
 Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSKPMQVSLRVHGPYWMHFCGSLIHPOVLTAAACVGPVDVLDLAL 60  
 DB 1 LEKRIVGGQEARSKPMQVSLRVHGPYWMHFCGSLIHPOVLTAAACVGPVDVLDLAL 60  
 QY 61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBPVKVSSHVHTVTLPPAS 120  
 DB 61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBPVKVSSHVHTVTLPPAS 120  
 QY 121 ETPPGMPCWVTGWDVNDERLPPPPPLKQVKVIMENHICDAKYHLGAYTGDDVRIVR 180  
 DB 121 ETPPGMPCWVTGWDVNDERLPPPPPLKQVKVIMENHICDAKYHLGAYTGDDVRIVR 180  
 QY 181 DDMLCAGNTRRDSQCGDSGGPLVCKVNGTWLOAGVSMGEGCAQPNRPGIYTRYTYLDW 240  
 DB 181 DDMLCAGNTRRDSQCGDSGGPLVCKVNGTWLOAGVSMGEGCAQPNRPGIYTRYTYLDW 240  
 QY 241 IHHYVPKKP 249  
 DB 241 IHHYVPKKP 249

RESULT 3  
 US-09-598-982C-9

Sequence 9, Application US/09598982C  
 GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffett, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 9  
 LENGTH: 249  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-598-982C-9

Query Match 99.6%; Score 1387; DB 1; Length 249;  
 Best Local Similarity 99.6%; Pred. No. 0;  
 Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSKPMQVSLRVHGPYWMHFCGSLIHPOVLTAAACVGPVDVLDLAL 60  
 DB 1 LEKRIVGGQEARSKPMQVSLRVHGPYWMHFCGSLIHPOVLTAAACVGPVDVLDLAL 60  
 QY 61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBPVKVSSHVHTVTLPPAS 120  
 DB 61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBPVKVSSHVHTVTLPPAS 120  
 QY 121 ETPPGMPCWVTGWDVNDERLPPPPPLKQVKVIMENHICDAKYHLGAYTGDDVRIVR 180  
 DB 121 ETPPGMPCWVTGWDVNDERLPPPPPLKQVKVIMENHICDAKYHLGAYTGDDVRIVR 180

QY 181 DDMLCAGNTRRDSQCGDSGGPLVCKVNGTWLOAGVSMGEGCAQPNRPGIYTRYTYLDW 240  
 DB 181 DDMLCAGNTRRDSQCGDSGGPLVCKVNGTWLOAGVSMGEGCAQPNRPGIYTRYTYLDW 240  
 QY 241 IHHYVPKKP 249  
 DB 241 IHHYVPKKP 249

RESULT 4  
 US-09-598-982C-25

Sequence 25, Application US/09598982C  
 GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffett, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 25  
 LENGTH: 249  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-598-982C-25

Query Match 99.4%; Score 1384; DB 1; Length 249;  
 Best Local Similarity 99.2%; Pred. No. 0;  
 Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSKPMQVSLRVHGPYWMHFCGSLIHPOVLTAAACVGPVDVLDLAL 60  
 DB 1 LEKRIVGGQEARSKPMQVSLRVHGPYWMHFCGSLIHPOVLTAAACVGPVDVLDLAL 60  
 QY 61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBPVKVSSHVHTVTLPPAS 120  
 DB 61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBPVKVSSHVHTVTLPPAS 120  
 QY 121 ETPPGMPCWVTGWDVNDERLPPPPPLKQVKVIMENHICDAKYHLGAYTGDDVRIVR 180  
 DB 121 ETPPGMPCWVTGWDVNDERLPPPPPLKQVKVIMENHICDAKYHLGAYTGDDVRIVR 180  
 QY 181 DDMLCAGNTRRDSQCGDSGGPLVCKVNGTWLOAGVSMGEGCAQPNRPGIYTRYTYLDW 240  
 DB 181 DDMLCAGNTRRDSQCGDSGGPLVCKVNGTWLOAGVSMGEGCAQPNRPGIYTRYTYLDW 240  
 QY 241 IHHYVPKKP 249  
 DB 241 IHHYVPKKP 249

RESULT 5  
 US-09-598-982C-27

Sequence 27, Application US/09598982C  
 GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffett, Mark  
 APPLICANT: Haak-Frendescho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 CURRENT FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO: 27

```

; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-27
```

```
Query Match          99.4%; Score 1384; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
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```
QY      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMMHFCGSSLHPQWVLTAAACVGPVDVLDLAL 60
DB      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMMHFCGSSLHPQWVLTAAACVGPVDVLDLAL 60
QY      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
DB      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
QY      121 ETPPPGMPQWVTGMDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIYR 180
DB      121 ETPPPGMPQWVTGMDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIYR 180
QY      181 DDMLCAGNTRRDS CGDSDGSPVCKVNGTWLQAGVSWGEGCAQPNRPGLITRTVITYLDW 240
DB      181 DDMLCAGNTRRDS CGDSDGSPVCKVNGTWLQAGVSWGEGCAQPNRPGLITRTVITYLDW 240
QY      241 IHHYVPKKP 249
DB      241 IHHYVPKKP 249
```

```
RESULT 6
US-09-598-982C-23
; Sequence 23, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 23
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-23
```

```
Query Match          99.0%; Score 1379; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMMHFCGSSLHPQWVLTAAACVGPVDVLDLAL 60
DB      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMMHFCGSSLHPQWVLTAAACVGPVDVLDLAL 60
QY      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
DB      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
QY      121 ETPPPGMPQWVTGMDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIYR 180
DB      121 ETPPPGMPQWVTGMDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIYR 180
QY      181 DDMLCAGNTRRDS CGDSDGSPVCKVNGTWLQAGVSWGEGCAQPNRPGLITRTVITYLDW 240
DB      181 DDMLCAGNTRRDS CGDSDGSPVCKVNGTWLQAGVSWGEGCAQPNRPGLITRTVITYLDW 240
QY      241 IHHYVPKKP 249
DB      241 IHHYVPKKP 249
```

```
DB      241 IHHYVPKKP 249
```

```
RESULT 7
US-09-598-982C-41
; Sequence 41, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 41
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-41
```

```
Query Match          99.0%; Score 1379; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMMHFCGSSLHPQWVLTAAACVGPVDVLDLAL 60
DB      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMMHFCGSSLHPQWVLTAAACVGPVDVLDLAL 60
QY      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
DB      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
QY      121 ETPPPGMPQWVTGMDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIYR 180
DB      121 ETPPPGMPQWVTGMDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIYR 180
QY      181 DDMLCAGNTRRDS CGDSDGSPVCKVNGTWLQAGVSWGEGCAQPNRPGLITRTVITYLDW 240
DB      181 DDMLCAGNTRRDS CGDSDGSPVCKVNGTWLQAGVSWGEGCAQPNRPGLITRTVITYLDW 240
QY      241 IHHYVPKKP 249
DB      241 IHHYVPKKP 249
```

```
RESULT 8
US-09-598-982C-43
; Sequence 43, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT FILING DATE: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 43
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-43
```

Query Match 99.0%; Score 1379; DB 1; Length 249;  
 Best Local Similarity 98.8%; Pred. No. 0;  
 Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQVLTAAACVGPVDVLAAL 60  
 DB 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQVLTAAACVGPVDVLAAL 60  
 QY 61 RVQLAEQHLYYDQDLPVSRITIVHPOFYTAQIGADIALLEBPVKVSSHVTTLPPAS 120  
 DB 61 RVQLAEQHLYYDQDLPVSRITIVHPOFYTAQIGADIALLEBPVKVSSHVTTLPPAS 120  
 QY 121 ETPPGMPCWVTGMDVNDERLPPFPPLKQVKVPIIMENHICDAKYHGAATGDDVRIYR 180  
 DB 121 ETPPGMPCWVTGMDVNDERLPPFPPLKQVKVPIIMENHICDAKYHGAATGDDVRIYR 180  
 QY 181 DMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYLDW 240  
 DB 181 DMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYLDW 240  
 QY 241 IHHVVPKXP 249  
 DB 241 IHHVVPKXP 249

# RESULT 9 US-09-598-982C-39

; Sequence 39, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598, 982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079, 970  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 39  
 ; LENGTH: 249  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-598-982C-39

Query Match 98.6%; Score 1374; DB 1; Length 249;  
 Best Local Similarity 98.8%; Pred. No. 0;  
 Matches 246; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQVLTAAACVGPVDVLAAL 60  
 DB 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQVLTAAACVGPVDVLAAL 60  
 QY 61 RVQLAEQHLYYDQDLPVSRITIVHPOFYTAQIGADIALLEBPVKVSSHVTTLPPAS 120  
 DB 61 RVQLAEQHLYYDQDLPVSRITIVHPOFYTAQIGADIALLEBPVKVSSHVTTLPPAS 120  
 QY 121 ETPPGMPCWVTGMDVNDERLPPFPPLKQVKVPIIMENHICDAKYHGAATGDDVRIYR 180  
 DB 121 ETPPGMPCWVTGMDVNDERLPPFPPLKQVKVPIIMENHICDAKYHGAATGDDVRIYR 180  
 QY 181 DMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYLDW 240  
 DB 181 DMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYLDW 240  
 QY 241 IHHVVPKXP 249  
 DB 241 IHHVVPKXP 249

RESULT 10

US-09-598-982C-11  
 ; Sequence 11, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598, 982C  
 ; PRIOR FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079, 970  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 11  
 ; LENGTH: 245  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-598-982C-11

Query Match 98.2%; Score 1368; DB 1; Length 245;  
 Best Local Similarity 99.6%; Pred. No. 0;  
 Matches 244; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 IVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQVLTAAACVGPVDVLAALRVQL 64  
 DB 1 IVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQVLTAAACVGPVDVLAALRVQL 60  
 QY 65 REQHLYYDQDLPVSRITIVHPOFYTAQIGADIALLEBPVKVSSHVTTLPPASSTFP 124  
 DB 61 REQHLYYDQDLPVSRITIVHPOFYTAQIGADIALLEBPVKVSSHVTTLPPASSTFP 120  
 QY 125 PGMPCWVTGMDVNDERLPPFPPLKQVKVPIIMENHICDAKYHGAATGDDVRIYRDM 184  
 DB 121 PGMPCWVTGMDVNDERLPPFPPLKQVKVPIIMENHICDAKYHGAATGDDVRIYRDM 180  
 QY 185 CAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYLDWTHY 244  
 DB 181 CAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYLDWTHY 240  
 QY 245 VPKXP 249  
 DB 241 VPKXP 245

Search completed: August 26, 2005, 12:29:15  
 Job time : 0.100161 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
 (without alignments)  
 6.180 Million cell updates/sec

Title: US-09-598-982C-23  
 Perfect score: 1395  
 Sequence: 1 LEKRIVGGGEAPRSKMPQV.....ITRVTYLDWTHYVKKP 249

Scoring table: BLOSUM62  
 Gapop 10.0, Gapext 0.5

Searched: 10 seqs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
 Maximum DB seq length: inf

Post-Processing: Minimum Match 0%

Maximum Match 100%

Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1395	100.0	249	1	US-09-598-982C-23
2	1390	99.6	249	1	US-09-598-982C-39
3	1389	99.6	249	1	US-09-598-982C-9
4	1386	99.4	249	1	US-09-598-982C-25
5	1386	99.4	249	1	US-09-598-982C-27
6	1381	99.0	249	1	US-09-598-982C-41
7	1381	99.0	249	1	US-09-598-982C-43
8	1379	98.9	249	1	US-09-598-982C-21
9	1374	98.5	249	1	US-09-598-982C-37
10	1370	98.2	245	1	US-09-598-982C-11

## ALIGNMENTS

RESULT 1  
US-09-598-982C-23  
; Sequence 23, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 23  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-23

Query Match 100.0%; Score 1395; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAHCVGPDVXDIAL 60  
DB 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAHCVGPDVXDIAL 60  
QY 61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAOIGAIALLELEBPVYSSHHTVTLPPAS 120  
DB 61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAOIGAIALLELEBPVYSSHHTVTLPPAS 120  
QY 121 ETPPPGMPQWVTGMDVNDERLPPFPFLKQVVPIMENHI CDAKYHLGAYTGDVRIYR 180  
DB 121 ETPPPGMPQWVTGMDVNDERLPPFPFLKQVVPIMENHI CDAKYHLGAYTGDVRIYR 180  
QY 181 DDMLCAGNTRRSDSCGDSGGPLVCYKNGTWLQAGVSWEGCAQPNRPGLIYRVTYLLDM 240  
DB 181 DDMLCAGNTRRSDSCGDSGGPLVCYKNGTWLQAGVSWEGCAQPNRPGLIYRVTYLLDM 240  
QY 241 IHHYVKKP 249

DB 241 IHHYVKKP 249

RESULT 2  
US-09-598-982C-39  
; Sequence 39, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 39  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-39

Query Match 99.6%; Score 1390; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAHCVGPDVXDIAL 60  
DB 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAHCVGPDVXDIAL 60  
QY 61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAOIGAIALLELEBPVYSSHHTVTLPPAS 120  
DB 61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAOIGAIALLELEBPVYSSHHTVTLPPAS 120  
QY 121 ETPPPGMPQWVTGMDVNDERLPPFPFLKQVVPIMENHI CDAKYHLGAYTGDVRIYR 180  
DB 121 ETPPPGMPQWVTGMDVNDERLPPFPFLKQVVPIMENHI CDAKYHLGAYTGDVRIYR 180  
QY 181 DDMLCAGNTRRSDSCGDSGGPLVCYKNGTWLQAGVSWEGCAQPNRPGLIYRVTYLLDM 240  
DB 181 DDMLCAGNTRRSDSCGDSGGPLVCYKNGTWLQAGVSWEGCAQPNRPGLIYRVTYLLDM 240  
QY 241 IHHYVKKP 249  
DB 241 IHHYVKKP 249

RESULT 3  
US-09-598-982C-9  
; Sequence 9, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 9  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-9

QY 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAHCVGPDVXDIAL 60  
DB 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAHCVGPDVXDIAL 60  
QY 61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAOIGAIALLELEBPVYSSHHTVTLPPAS 120  
DB 61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAOIGAIALLELEBPVYSSHHTVTLPPAS 120  
QY 121 ETPPPGMPQWVTGMDVNDERLPPFPFLKQVVPIMENHI CDAKYHLGAYTGDVRIYR 180  
DB 121 ETPPPGMPQWVTGMDVNDERLPPFPFLKQVVPIMENHI CDAKYHLGAYTGDVRIYR 180  
QY 181 DDMLCAGNTRRSDSCGDSGGPLVCYKNGTWLQAGVSWEGCAQPNRPGLIYRVTYLLDM 240  
DB 181 DDMLCAGNTRRSDSCGDSGGPLVCYKNGTWLQAGVSWEGCAQPNRPGLIYRVTYLLDM 240  
QY 241 IHHYVKKP 249  
DB 241 IHHYVKKP 249

Query Match 99.6%; Score 1389; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60  
DB 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60  
QY 61 RVQLREOHLXYQDOLLPVSRITVHPQFTTAQIGAAIALLELEEPKVSHTVTTLPPAS 120  
DB 61 RVQLREOHLXYQDOLLPVSRITVHPQFTTAQIGAAIALLELEEPKVSHTVTTLPPAS 120  
QY 121 ETPPGMPCWVTGWDVNDERLPPRPLKQVPIIMENHICDAKYHLAGYTGDDVRIYR 180  
DB 121 ETPPGMPCWVTGWDVNDERLPPRPLKQVPIIMENHICDAKYHLAGYTGDDVRIYR 180  
QY 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVWSGEGCAQPNRPGIYTRVTYYLDW 240  
DB 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVWSGEGCAQPNRPGIYTRVTYYLDW 240  
QY 241 IHHTYPPKKP 249  
DB 241 IHHTYPPKKP 249

RESULT 4  
US-09-598-982C-25  
; Sequence 25, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 25  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-25

Query Match 99.4%; Score 1386; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60  
DB 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60  
QY 61 RVQLREOHLXYQDOLLPVSRITVHPQFTTAQIGAAIALLELEEPKVSHTVTTLPPAS 120  
DB 61 RVQLREOHLXYQDOLLPVSRITVHPQFTTAQIGAAIALLELEEPKVSHTVTTLPPAS 120  
QY 121 ETPPGMPCWVTGWDVNDERLPPRPLKQVPIIMENHICDAKYHLAGYTGDDVRIYR 180  
DB 121 ETPPGMPCWVTGWDVNDERLPPRPLKQVPIIMENHICDAKYHLAGYTGDDVRIYR 180  
QY 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVWSGEGCAQPNRPGIYTRVTYYLDW 240  
DB 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVWSGEGCAQPNRPGIYTRVTYYLDW 240  
QY 241 IHHTYPPKKP 249  
DB 241 IHHTYPPKKP 249

RESULT 5

US-09-598-982C-27  
; Sequence 27, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 27  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-27

Query Match 99.4%; Score 1386; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60  
DB 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60  
QY 61 RVQLREOHLXYQDOLLPVSRITVHPQFTTAQIGAAIALLELEEPKVSHTVTTLPPAS 120  
DB 61 RVQLREOHLXYQDOLLPVSRITVHPQFTTAQIGAAIALLELEEPKVSHTVTTLPPAS 120  
QY 121 ETPPGMPCWVTGWDVNDERLPPRPLKQVPIIMENHICDAKYHLAGYTGDDVRIYR 180  
DB 121 ETPPGMPCWVTGWDVNDERLPPRPLKQVPIIMENHICDAKYHLAGYTGDDVRIYR 180  
QY 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVWSGEGCAQPNRPGIYTRVTYYLDW 240  
DB 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVWSGEGCAQPNRPGIYTRVTYYLDW 240  
QY 241 IHHTYPPKKP 249  
DB 241 IHHTYPPKKP 249

RESULT 6  
US-09-598-982C-41  
; Sequence 41, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR FILING DATE: 2000-06-21  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 41  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-41

Query Match 99.0%; Score 1381; DB 1; Length 249;  
Best Local Similarity 98.8%; Pred. No. 0;  
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 LEKRIVGGQEARSRKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDKDLAAL 60

```
Db      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Qy      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGAAIALLEBEPVKVSSHHTVTLPPAS 120
Db      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGADIALLEBEPVAVSSHHTVTLPPAS 120
Qy      121 ETPPPGMCWVTGMDVNDERLPPRPLKQVKVPIEMENHICDAKTHLGATYGDVRIYR 180
Db      121 ETPPPGMCWVTGMDVNDERLPPRPLKQVKVPIEMENHICDAKTHLGATYGDVRIYR 180
Qy      181 DDMLCAGNTRRDS CGDGSGLVCKVNGTWMLOAGVSWGEGCAQPNRPGIYTRVITYLDM 240
Db      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWMLOAGVSWGEGCAQPNRPGIYTRVITYLDM 240
Qy      241 IHHYVPKKP 249
Db      241 IHHYVPKKP 249
```

```
RESULT 7
US-09-598-982C-43
; Sequence 43, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 43
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-43
```

```
Query Match      99.0%; Score 1381; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Db      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Qy      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGAAIALLEBEPVKVSSHHTVTLPPAS 120
Db      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGADIALLEBEPVAVSSHHTVTLPPAS 120
Qy      121 ETPPPGMCWVTGMDVNDERLPPRPLKQVKVPIEMENHICDAKTHLGATYGDVRIYR 180
Db      121 ETPPPGMCWVTGMDVNDERLPPRPLKQVKVPIEMENHICDAKTHLGATYGDVRIYR 180
Qy      181 DDMLCAGNTRRDS CGDGSGLVCKVNGTWMLOAGVSWGEGCAQPNRPGIYTRVITYLDM 240
Db      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWMLOAGVSWGEGCAQPNRPGIYTRVITYLDM 240
Qy      241 IHHYVPKKP 249
Db      241 IHHYVPKKP 249
```

```
RESULT 8
US-09-598-982C-21
; Sequence 21, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
```

```
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 21
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-21
```

```
Query Match      98.9%; Score 1379; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Db      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Qy      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGAAIALLEBEPVKVSSHHTVTLPPAS 120
Db      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGADIALLEBEPVAVSSHHTVTLPPAS 120
Qy      121 ETPPPGMCWVTGMDVNDERLPPRPLKQVKVPIEMENHICDAKTHLGATYGDVRIYR 180
Db      121 ETPPPGMCWVTGMDVNDERLPPRPLKQVKVPIEMENHICDAKTHLGATYGDVRIYR 180
Qy      181 DDMLCAGNTRRDS CGDGSGLVCKVNGTWMLOAGVSWGEGCAQPNRPGIYTRVITYLDM 240
Db      181 DDMLCAGNTRRDS CGDGSGLVCKVNGTWMLOAGVSWGEGCAQPNRPGIYTRVITYLDM 240
Qy      241 IHHYVPKKP 249
Db      241 IHHYVPKKP 249
```

```
RESULT 9
US-09-598-982C-37
; Sequence 37, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 37
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-37
```

```
Query Match      98.5%; Score 1374; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Db      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
Qy      61 RVQLREOHLYYQDQLPVSRIIVHPQYTAQIGAAIALLEBEPVKVSSHHTVTLPPAS 120
```



```

Db      61 RVQLREQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNSHVHTVTLPPAS 120
QY      121 ETPPGMCWVTGMDVNDERLPPFPFLKQYKVIEMNHICDAXYHIGATYGDVIR 180
Db      121 ETPPGMCWVTGMDVNDERLPPFPFLKQYKVIEMNHICDAXYHIGATYGDVIR 180
QY      181 DDMLCAGNTRRDS CGGDSGSLVCKVNGTWLQAGVNSWEGCAQPNRPGIYTRVYIYDM 240
Db      181 DDMLCAGNTRRDS CGGDSGSLVCKVNGTWLQAGVNSWEGCAQPNRPGIYTRVYIYDM 240
QY      241 IHHVYPKKP 249
Db      241 IHHVYPKKP 249

```

```

RESULT 10
US-09-598-982C-11
; Sequence 11, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 11
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-11

```

```

Query Match      98.2%; Score 1370; DB 1; Length 245;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 244; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      5 IVGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVKDLAALRVOL 64
Db      1 IVGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVKDLAALRVOL 60
QY      65 REQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNSHVHTVTLPPAS 124
Db      61 REQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNSHVHTVTLPPAS 120
QY      125 PGMPGMCWVTGMDVNDERLPPFPFLKQYKVIEMNHICDAXYHIGATYGDVIR 184
Db      121 PGMPGMCWVTGMDVNDERLPPFPFLKQYKVIEMNHICDAXYHIGATYGDVIR 180
QY      185 CAGNTRRDS CGGDSGSLVCKVNGTWLQAGVNSWEGCAQPNRPGIYTRVYIYDM 244
Db      181 CAGNTRRDS CGGDSGSLVCKVNGTWLQAGVNSWEGCAQPNRPGIYTRVYIYDM 240
QY      245 VPKKP 249
Db      241 VPKKP 245

```

Search completed: August 26, 2005, 12:29:16  
Job time : 1.10016 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model  
Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
(without alignments)

```

Title: US-09-598-982C-25
Perfect score: 1397
Sequence: 1 LEKRIVGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVKDLAALRVOL 249
Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5
Searched: 10 seqs, 2486 residues
Total number of hits satisfying chosen parameters: 10
Minimum DB seq length: 0
Maximum DB seq length: inf
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 200 summaries
Database : US09598982C_rev.pep.*

```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Length	ID	Description
1	1397	100.0	249	Sequence 25, Appl
2	1397	100.0	249	Sequence 27, Appl
3	1394	99.8	249	Sequence 9, Appl
4	1392	99.6	249	Sequence 41, Appl
5	1392	99.6	249	Sequence 43, Appl
6	1386	99.2	249	Sequence 23, Appl
7	1384	99.1	249	Sequence 21, Appl
8	1381	98.9	249	Sequence 39, Appl
9	1379	98.7	249	Sequence 37, Appl
10	1375	98.4	245	Sequence 11, Appl

## ALIGNMENTS

```

RESULT 1
US-09-598-982C-25
; Sequence 25, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 25
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-25

```

```

Query Match      100.0%; Score 1397; DB 1; Length 249;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 LEKRIVGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPDVKDLAALRVOL 60

```

```
Db      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Qy      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
Db      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
Qy      121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIVR 180
Db      121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIVR 180
Qy      181 DDMLCAGNTRRDS CGDAGGPLVCVNGTWLQAGVSWGSGCAQPNRPGIYTRVITYLDM 240
Db      181 DDMLCAGNTRRDS CGDAGGPLVCVNGTWLQAGVSWGSGCAQPNRPGIYTRVITYLDM 240
Qy      241 IHHTYVKKP 249
Db      241 IHHTYVKKP 249
```

```
RESULT 2
US-09-598-982C-27
; Sequence 27, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilet, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 27
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-27
```

```
Query Match      100.0%; Score 1397; DB 1; Length 249;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Db      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Qy      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
Db      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
Qy      121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIVR 180
Db      121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIVR 180
Qy      181 DDMLCAGNTRRDS CGDAGGPLVCVNGTWLQAGVSWGSGCAQPNRPGIYTRVITYLDM 240
Db      181 DDMLCAGNTRRDS CGDAGGPLVCVNGTWLQAGVSWGSGCAQPNRPGIYTRVITYLDM 240
Qy      241 IHHTYVKKP 249
Db      241 IHHTYVKKP 249
```

```
RESULT 3
US-09-598-982C-9
; Sequence 9, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilet, Mark
```

```
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 9
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-9
```

```
Query Match      99.8%; Score 1394; DB 1; Length 249;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 248; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Db      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Qy      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
Db      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
Qy      121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIVR 180
Db      121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQVVPIMENHI CDAKYHLGAYTGDDVRIVR 180
Qy      181 DDMLCAGNTRRDS CGDAGGPLVCVNGTWLQAGVSWGSGCAQPNRPGIYTRVITYLDM 240
Db      181 DDMLCAGNTRRDS CGDAGGPLVCVNGTWLQAGVSWGSGCAQPNRPGIYTRVITYLDM 240
Qy      241 IHHTYVKKP 249
Db      241 IHHTYVKKP 249
```

```
RESULT 4
US-09-598-982C-41
; Sequence 41, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilet, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598, 982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079, 970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 41
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-41
```

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Query Match      99.6%; Score 1392; DB 1; Length 249;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Db      1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Qy      61 RVQLREOHLYYODQLLPVSRILVHPQFYTAQIGADIALLEBEPVYSSHVHTVTLPPAS 120
```

Db 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
Db 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
QY 181 DDMLCAGNTRRDS CGGDAGPLVCVNGTWLQAGVWSWGSCAOPNRPGIYTRVITYLDM 240  
Db 181 DDMLCAGNTRRDS CGGDAGPLVCVNGTWLQAGVWSWGSCAOPNRPGIYTRVITYLDM 240  
QY 241 IHHYVPKKP 249  
Db 241 IHHYVPKKP 249

RESULT 5  
US-09-598-982C-43  
; Sequence 43, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 43  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-43

Query Match 99.6%; Score 1392; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPWQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
Db 1 LEKRIVGGEAPRSKMPWQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
QY 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
Db 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
Db 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
QY 181 DDMLCAGNTRRDS CGGDAGPLVCVNGTWLQAGVWSWGSCAOPNRPGIYTRVITYLDM 240  
Db 181 DDMLCAGNTRRDS CGGDAGPLVCVNGTWLQAGVWSWGSCAOPNRPGIYTRVITYLDM 240  
QY 241 IHHYVPKKP 249  
Db 241 IHHYVPKKP 249

RESULT 6  
US-09-598-982C-23  
; Sequence 23, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C

; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 23  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-23

Query Match 99.2%; Score 1386; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPWQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
Db 1 LEKRIVGGEAPRSKMPWQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
QY 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
Db 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
Db 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
QY 181 DDMLCAGNTRRDS CGGDAGPLVCVNGTWLQAGVWSWGSCAOPNRPGIYTRVITYLDM 240  
Db 181 DDMLCAGNTRRDS CGGDAGPLVCVNGTWLQAGVWSWGSCAOPNRPGIYTRVITYLDM 240  
QY 241 IHHYVPKKP 249  
Db 241 IHHYVPKKP 249

RESULT 7  
US-09-598-982C-21  
; Sequence 21, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 21  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-21

Query Match 99.1%; Score 1384; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPWQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
Db 1 LEKRIVGGEAPRSKMPWQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60  
QY 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
Db 61 RVQLREQLYYQDQLPVSRIIVHPQFYTAQIGADIALLELEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180  
Db 121 ETPPPGMCWVTGMDVNDERLPPPEPLKQVKVPIEMENHICDAKYHLGAYTGDVRIYR 180

```
Qy      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
      |||
Db      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
Qy      241 IHHYVPKKP 249
      |||
Db      241 IHHYVPKKP 249
```

```
RESULT 8
US-09-598-982C-39
; Sequence 39, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 39
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-39
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Query Match      98.9%; Score 1381; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy      1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
      |||
Db      1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Qy      61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVKS SHVHTVTLPPAS 120
      |||
Db      61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVKS SHVHTVTLPPAS 120
Qy      121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVPI MENHICDAKYHLGAYTGDDVRIYR 180
      |||
Db      121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVPI MENHICDAKYHLGAYTGDDVRIYR 180
Qy      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
      |||
Db      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
Qy      241 IHHYVPKKP 249
      |||
Db      241 IHHYVPKKP 249
```

```
RESULT 9
US-09-598-982C-37
; Sequence 37, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
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```
; SEQ ID NO 37
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-37
```

```
Query Match      98.7%; Score 1379; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
      |||
Db      1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVXDIAL 60
Qy      61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVKS SHVHTVTLPPAS 120
      |||
Db      61 RVQLREOHLYYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVKS SHVHTVTLPPAS 120
Qy      121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVPI MENHICDAKYHLGAYTGDDVRIYR 180
      |||
Db      121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVPI MENHICDAKYHLGAYTGDDVRIYR 180
Qy      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
      |||
Db      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
Qy      241 IHHYVPKKP 249
      |||
Db      241 IHHYVPKKP 249
```

```
RESULT 10
US-09-598-982C-11
; Sequence 11, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilit, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 11
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-11
```

```
Query Match      98.4%; Score 1375; DB 1; Length 245;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 244; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      5 IVGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVXDIALRVQL 64
      |||
Db      1 IVGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVXDIALRVQL 60
Qy      65 REOHLYYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVKS SHVHTVTLPPASSTFP 124
      |||
Db      61 REOHLYYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVKS SHVHTVTLPPASSTFP 120
Qy      125 PGMPGCMVTGMDVNDERLPPFPPLKQVKVPI MENHICDAKYHLGAYTGDDVRIYRDM 184
      |||
Db      121 PGMPGCMVTGMDVNDERLPPFPPLKQVKVPI MENHICDAKYHLGAYTGDDVRIYRDM 180
Qy      185 CAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 244
      |||
Db      181 CAGNTRRDS CGDAGGGLVCKVNGTWTLOAGVSWGSCAOPNRPGIYTRVYYLDM 240
```

Oy 245 VPKKP 249  
Db 241 VPKKP 245

Search completed: August 26, 2005, 12:29:16  
Job time : 0.100161 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
(without alignments)  
6.180 Million cell updates/sec

Title: US-09-598-982C-27

Perfect score: 1397  
Sequence: 1 LEKRIVGQGEAPRSKMPQV.....ITYRVTYLLDWIHHTVPPKP 249

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 10 seqs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1397	100.0	249	1	US-09-598-982C-25
2	1397	100.0	249	1	US-09-598-982C-27
3	1394	99.8	249	1	US-09-598-982C-9
4	1392	99.6	249	1	US-09-598-982C-41
5	1392	99.6	249	1	US-09-598-982C-43
6	1386	99.2	249	1	US-09-598-982C-23
7	1384	99.1	249	1	US-09-598-982C-21
8	1381	98.9	249	1	US-09-598-982C-39
9	1379	98.7	249	1	US-09-598-982C-37
10	1375	98.4	245	1	US-09-598-982C-11

## ALIGNMENTS

RESULT 1  
US-09-598-982C-25  
; Sequence 25, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C

CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 25  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-25

Query Match 100.0%; Score 1397; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Oy 1 LEKRIVGQGEAPRSKMPQVSLRVHGYWMHFCGGSILHPOWVLTAAHCVPDVKDIAL 60
Db 1 LEKRIVGQGEAPRSKMPQVSLRVHGYWMHFCGGSILHPOWVLTAAHCVPDVKDIAL 60
Oy 61 RVQIREQHLTYDDLLPVSRIIVHPQFTYTAQIGADIALLEBEPVKVSSHVHTVLPAS 120
Db 61 RVQIREQHLTYDDLLPVSRIIVHPQFTYTAQIGADIALLEBEPVKVSSHVHTVLPAS 120
Oy 121 ETPPGMPGKWTGWDVNDERLPPPPPLKQVKVPIEMENHICDAKYHLAGVTDGDAIVR 180
Db 121 ETPPGMPGKWTGWDVNDERLPPPPPLKQVKVPIEMENHICDAKYHLAGVTDGDAIVR 180
Oy 121 ETPPGMPGKWTGWDVNDERLPPPPPLKQVKVPIEMENHICDAKYHLAGVTDGDAIVR 180
Db 121 ETPPGMPGKWTGWDVNDERLPPPPPLKQVKVPIEMENHICDAKYHLAGVTDGDAIVR 180
Oy 181 DDMLCAGNTRRDSQGDAGGPLYCKVNGTWLQAGVSWGSCAQPNNPGIYRVTYLLDW 240
Db 181 DDMLCAGNTRRDSQGDAGGPLYCKVNGTWLQAGVSWGSCAQPNNPGIYRVTYLLDW 240
Oy 241 IHHVPPKP 249
Db 241 IHHVPPKP 249
```

## RESULT 2

US-09-598-982C-27  
; Sequence 27, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 27  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-27

Query Match 100.0%; Score 1397; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Oy 1 LEKRIVGQGEAPRSKMPQVSLRVHGYWMHFCGGSILHPOWVLTAAHCVPDVKDIAL 60
Db 1 LEKRIVGQGEAPRSKMPQVSLRVHGYWMHFCGGSILHPOWVLTAAHCVPDVKDIAL 60
Oy 61 RVQIREQHLTYDDLLPVSRIIVHPQFTYTAQIGADIALLEBEPVKVSSHVHTVLPAS 120
Db 61 RVQIREQHLTYDDLLPVSRIIVHPQFTYTAQIGADIALLEBEPVKVSSHVHTVLPAS 120
Oy 121 ETPPGMPGKWTGWDVNDERLPPPPPLKQVKVPIEMENHICDAKYHLAGVTDGDAIVR 180
Db 121 ETPPGMPGKWTGWDVNDERLPPPPPLKQVKVPIEMENHICDAKYHLAGVTDGDAIVR 180
```



OY 241 IHHTVKKP 249  
DB 241 IHHTVKKP 249

RESULT 6  
US-09-598-982C-23

; Sequence 23, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffett, Mark  
; APPLICANT: Haak-Frendsch, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 23  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-23

Query Match 99.2%; Score 1386; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 LEKRIVGQGEAPRSKPMQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPVDKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKPMQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPVDKDLAAL 60  
OY 61 RVQLREQHLYYODQLPVSRILVHPQFYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120  
DB 61 RVQLREQHLYYODQLPVSRILVHPQFYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120  
OY 121 ETPPPGMPCWVTGWDVNDNERLPPFPLKQVKVPIEMENHICDAKYHLGAYTGDDVRIVR 180  
DB 121 ETPPPGMPCWVTGWDVNDNERLPPFPLKQVKVPIEMENHICDAKYHLGAYTGDDVRIVR 180  
OY 181 DDMLCAGNTRRDSGCGDAGGPIVCKVNGTWLQAGVWSMGSCAQPNNRGITRTVYYLIDW 240  
DB 181 DDMLCAGNTRRDSGCGDAGGPIVCKVNGTWLQAGVWSMGSCAQPNNRGITRTVYYLIDW 240  
OY 241 IHHTVKKP 249  
DB 241 IHHTVKKP 249

RESULT 7

US-09-598-982C-21  
; Sequence 21, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffett, Mark  
; APPLICANT: Haak-Frendsch, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 21  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-21

Query Match 99.1%; Score 1384; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 LEKRIVGQGEAPRSKPMQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPVDKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKPMQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPVDKDLAAL 60  
OY 61 RVQLREQHLYYODQLPVSRILVHPQFYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120  
DB 61 RVQLREQHLYYODQLPVSRILVHPQFYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120  
OY 121 ETPPPGMPCWVTGWDVNDNERLPPFPLKQVKVPIEMENHICDAKYHLGAYTGDDVRIVR 180  
DB 121 ETPPPGMPCWVTGWDVNDNERLPPFPLKQVKVPIEMENHICDAKYHLGAYTGDDVRIVR 180  
OY 181 DDMLCAGNTRRDSGCGDAGGPIVCKVNGTWLQAGVWSMGSCAQPNNRGITRTVYYLIDW 240  
DB 181 DDMLCAGNTRRDSGCGDAGGPIVCKVNGTWLQAGVWSMGSCAQPNNRGITRTVYYLIDW 240  
OY 241 IHHTVKKP 249  
DB 241 IHHTVKKP 249

RESULT 8

US-09-598-982C-39  
; Sequence 39, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffett, Mark  
; APPLICANT: Haak-Frendsch, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 39  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-39

Query Match 98.9%; Score 1381; DB 1; Length 249;  
Best Local Similarity 98.8%; Pred. No. 0;  
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 LEKRIVGQGEAPRSKPMQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPVDKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKPMQVSLRVHGPYMMHFCGSLIHPOWVLTAAHCVGPVDKDLAAL 60  
OY 61 RVQLREQHLYYODQLPVSRILVHPQFYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120  
DB 61 RVQLREQHLYYODQLPVSRILVHPQFYTAQIGADIALLEBEPVKVSSHVHTVTLPPAS 120  
OY 121 ETPPPGMPCWVTGWDVNDNERLPPFPLKQVKVPIEMENHICDAKYHLGAYTGDDVRIVR 180  
DB 121 ETPPPGMPCWVTGWDVNDNERLPPFPLKQVKVPIEMENHICDAKYHLGAYTGDDVRIVR 180  
OY 181 DDMLCAGNTRRDSGCGDAGGPIVCKVNGTWLQAGVWSMGSCAQPNNRGITRTVYYLIDW 240  
DB 181 DDMLCAGNTRRDSGCGDAGGPIVCKVNGTWLQAGVWSMGSCAQPNNRGITRTVYYLIDW 240  
OY 241 IHHTVKKP 249  
DB 241 IHHTVKKP 249



```

RESULT 9
US-09-598-982C-37
; Sequence 37, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 37
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-37

```

```

Query Match      98.7%; Score 1379; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVDLAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVDLAL 60
QY 61 RVQRLRQHLIYYQDQLPVSRIIVHPOFYTAQIGADIALLEBPVSVSHVHTVTLPPAS 120
DB 61 RVQRLRQHLIYYQDQLPVSRIIVHPOFYTAQIGADIALLEBPVSVSHVHTVTLPPAS 120
QY 121 ETTPPGMPCWVTGWGDVNDERLPPFPPLKQVVPIMENHICDAKXHLGAYTGDDVRIYR 180
DB 121 ETTPPGMPCWVTGWGDVNDERLPPFPPLKQVVPIMENHICDAKXHLGAYTGDDVRIYR 180
QY 181 DDMLCAGNTRRDSGCGSDGSLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
DB 181 DDMLCAGNTRRDSGCGSDGSLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
QY 241 IHHYVPEKP 249
DB 241 IHHYVPEKP 249

```

```

RESULT 10
US-09-598-982C-11
; Sequence 11, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Mafilt, Mark
; APPLICANT: Haak-Frendescho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 11
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-11

```

```

Query Match      98.4%; Score 1375; DB 1; Length 245;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 244; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 5 IVGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVDLALRQVL 64
DB 1 IVGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVDLALRQVL 60
QY 65 RBQHLIYYQDQLPVSRIIVHPOFYTAQIGADIALLEBPVSVSHVHTVTLPPASETFP 124
DB 61 RBQHLIYYQDQLPVSRIIVHPOFYTAQIGADIALLEBPVSVSHVHTVTLPPASETFP 120
QY 125 PGMPCWVTGWGDVNDERLPPFPPLKQVVPIMENHICDAKXHLGAYTGDDVRIYRDM 184
DB 121 PGMPCWVTGWGDVNDERLPPFPPLKQVVPIMENHICDAKXHLGAYTGDDVRIYRDM 180
QY 185 CAGNTRRDSGCGSDGSLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMTHY 244
DB 181 CAGNTRRDSGCGSDGSLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDMTHY 240
QY 245 VPKKP 249
DB 241 VPKKP 245

```

Search completed: August 26, 2005, 12:29:16  
Job time : 0.100161 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
(without alignments)  
6.180 Million cell updates/sec

Title: US-09-598-982C-37

Perfect score: 1394  
Sequence: 1 LEKRIVGGEAPRSKMPQV.....IYTRVYYLDMIHVPEKP 249

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 10 segs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match length	ID	Description
1	1394	100.0	249 1	US-09-598-982C-37 Sequence 37, Appl
2	1388	99.6	249 1	US-09-598-982C-21 Sequence 21, Appl
3	1385	99.4	249 1	US-09-598-982C-41 Sequence 41, Appl
4	1385	99.4	249 1	US-09-598-982C-43 Sequence 43, Appl
5	1382	99.1	249 1	US-09-598-982C-9 Sequence 9, Appl
6	1380	99.0	249 1	US-09-598-982C-39 Sequence 39, Appl
7	1379	98.9	249 1	US-09-598-982C-25 Sequence 25, Appl
8	1379	98.9	249 1	US-09-598-982C-27 Sequence 27, Appl
9	1374	98.6	249 1	US-09-598-982C-23 Sequence 23, Appl
10	1363	97.8	245 1	US-09-598-982C-11 Sequence 11, Appl

## ALIGNMENTS

## RESULT 1

US-09-598-982C-37  
 ; Sequence 37, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffett, Mark  
 ; APPLICANT: Haak-Frendsch, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 37  
 ; LENGTH: 249  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-598-982C-37

Query Match 100.0%; Score 1394; DB 1; Length 249;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAACVGPVDKDLAAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAACVGPVDKDLAAL 60
QY 61 RVQLREOHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120
DB 61 RVQLREOHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120
QY 121 ETPPGMPCWVTGWDVNDERLPPPLKQVKVPIEMNHICDAKYLGAITGDDVRIVR 180
DB 121 ETPPGMPCWVTGWDVNDERLPPPLKQVKVPIEMNHICDAKYLGAITGDDVRIVR 180
QY 181 DDMLCAGNTRRDS CGDSGGPLVCKVNGTWLQAGVSWGBCAQPNRPGIYTRVTYYLIDW 240
DB 181 DDMLCAGNTRRDS CGDSGGPLVCKVNGTWLQAGVSWGBCAQPNRPGIYTRVTYYLIDW 240
QY 241 IHHTVPPKKP 249
DB 241 IHHTVPPKKP 249

```

## RESULT 2

US-09-598-982C-21  
 ; Sequence 21, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffett, Mark  
 ; APPLICANT: Haak-Frendsch, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 21  
 ; LENGTH: 249  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-598-982C-21

Query Match 99.6%; Score 1388; DB 1; Length 249;  
 Best Local Similarity 99.6%; Pred. No. 0;  
 Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAACVGPVDKDLAAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAACVGPVDKDLAAL 60
QY 61 RVQLREOHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120
DB 61 RVQLREOHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120
QY 121 ETPPGMPCWVTGWDVNDERLPPPLKQVKVPIEMNHICDAKYLGAITGDDVRIVR 180
DB 121 ETPPGMPCWVTGWDVNDERLPPPLKQVKVPIEMNHICDAKYLGAITGDDVRIVR 180
QY 181 DDMLCAGNTRRDS CGDSGGPLVCKVNGTWLQAGVSWGBCAQPNRPGIYTRVTYYLIDW 240
DB 181 DDMLCAGNTRRDS CGDSGGPLVCKVNGTWLQAGVSWGBCAQPNRPGIYTRVTYYLIDW 240
QY 241 IHHTVPPKKP 249
DB 241 IHHTVPPKKP 249

```

## RESULT 3

US-09-598-982C-41  
 ; Sequence 41, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffett, Mark  
 ; APPLICANT: Haak-Frendsch, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 41  
 ; LENGTH: 249  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-598-982C-41

Query Match 99.4%; Score 1385; DB 1; Length 249;  
 Best Local Similarity 99.2%; Pred. No. 0;  
 Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAACVGPVDKDLAAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPOWVLTAAACVGPVDKDLAAL 60
QY 61 RVQLREOHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120
DB 61 RVQLREOHLVYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120
QY 121 ETPPGMPCWVTGWDVNDERLPPPLKQVKVPIEMNHICDAKYLGAITGDDVRIVR 180
DB 121 ETPPGMPCWVTGWDVNDERLPPPLKQVKVPIEMNHICDAKYLGAITGDDVRIVR 180
QY 181 DDMLCAGNTRRDS CGDSGGPLVCKVNGTWLQAGVSWGBCAQPNRPGIYTRVTYYLIDW 240
DB 181 DDMLCAGNTRRDS CGDSGGPLVCKVNGTWLQAGVSWGBCAQPNRPGIYTRVTYYLIDW 240
QY 241 IHHTVPPKKP 249
DB 241 IHHTVPPKKP 249

```

```

RESULT 4
US-09-598-982C-43
; Sequence 43, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 43
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-43

```

```

Query Match
Best Local Similarity 99.4%; Score 1385; DB 1; Length 249;
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAACVGPVDVLDLAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAACVGPVDVLDLAL 60
QY 61 RVQLREOHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
DB 61 RVQLREOHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
QY 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
QY 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
QY 181 DDMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWEGCAQPNRPGIYTRVITYLDW 240
DB 181 DDMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWEGCAQPNRPGIYTRVITYLDW 240
QY 241 IHHYVPKKP 249
DB 241 IHHYVPKKP 249

```

```

RESULT 5
US-09-598-982C-9
; Sequence 9, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 9
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-9

```

```

Query Match
Best Local Similarity 99.1%; Score 1382; DB 1; Length 249;
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAACVGPVDVLDLAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAACVGPVDVLDLAL 60
QY 61 RVQLREOHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
DB 61 RVQLREOHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
QY 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
QY 181 DDMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWEGCAQPNRPGIYTRVITYLDW 240
DB 181 DDMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWEGCAQPNRPGIYTRVITYLDW 240
QY 241 IHHYVPKKP 249
DB 241 IHHYVPKKP 249

```

```

RESULT 6
US-09-598-982C-39
; Sequence 39, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; PRIOR FILING DATE: 2000-06-21
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 39
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-39

```

```

Query Match
Best Local Similarity 99.0%; Score 1380; DB 1; Length 249;
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAACVGPVDVLDLAL 60
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAACVGPVDVLDLAL 60
QY 61 RVQLREOHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
DB 61 RVQLREOHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
QY 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETPPPGMCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIYR 180
QY 181 DDMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWEGCAQPNRPGIYTRVITYLDW 240
DB 181 DDMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWEGCAQPNRPGIYTRVITYLDW 240
QY 241 IHHYVPKKP 249
DB 241 IHHYVPKKP 249

```

```

RESULT 7
US-09-598-982C-25
; Sequence 25, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew

```

APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 25  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-25

Query Match 98.9%; Score 1379; DB 1; Length 249;  
Best Local Similarity 98.8%; Pred. No. 0;  
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAACVGPVDVLDLAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAACVGPVDVLDLAL 60  
QY 61 RVQAREQHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120  
DB 61 RVQAREQHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
DB 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
QY 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
DB 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
QY 181 DDMLCAGNTRRDSQGGSGGPLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYYLDM 240  
DB 181 DDMLCAGNTRRDSQGGSGGPLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYYLDM 240  
QY 241 IHNVYPPKP 249  
DB 241 IHNVYPPKP 249

## RESULT 8

US-09-598-982C-27  
Sequence 27, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 27  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-27

Query Match 98.9%; Score 1379; DB 1; Length 249;  
Best Local Similarity 98.8%; Pred. No. 0;  
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAACVGPVDVLDLAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAACVGPVDVLDLAL 60  
QY 61 RVQAREQHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120

DB 61 RVQAREQHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
DB 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
QY 181 DDMLCAGNTRRDSQGGSGGPLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYYLDM 240  
DB 181 DDMLCAGNTRRDSQGGSGGPLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYYLDM 240  
QY 241 IHNVYPPKP 249  
DB 241 IHNVYPPKP 249

## RESULT 9

US-09-598-982C-23  
Sequence 23, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104  
CURRENT FILING DATE: 2000-06-21  
PRIOR FILING DATE: 1998-04-15  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 23  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-23

Query Match 98.6%; Score 1374; DB 1; Length 249;  
Best Local Similarity 98.8%; Pred. No. 0;  
Matches 246; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAACVGPVDVLDLAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPQWVLTAAACVGPVDVLDLAL 60  
QY 61 RVQAREQHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120  
DB 61 RVQAREQHLYYQDQLPVSRILVHPQFYTAQIGADIALLEBEPVNVSSHVHTVTLPPAS 120  
QY 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
DB 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
QY 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
DB 121 ETPPGMPCWVTGMDVNDERLPPFPLKQVKVPIEMNHICDAKYLGAATGDDVRIVR 180  
QY 181 DDMLCAGNTRRDSQGGSGGPLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYYLDM 240  
DB 181 DDMLCAGNTRRDSQGGSGGPLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYYLDM 240  
QY 241 IHNVYPPKP 249  
DB 241 IHNVYPPKP 249

## RESULT 10

US-09-598-982C-11  
Sequence 11, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendascho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
TITLE OF INVENTION: AND METHODS OF MAKING SAME  
FILE REFERENCE: 34506.104

; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO: 11  
 ; LENGTH: 245  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-598-982C-11

Query Match 97.8%; Score 1363; DB 1; Length 245;  
 Best Local Similarity 99.2%; Pred. No. 0;  
 Matches 243; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 5 IVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWLTAAACVGPDKDLAALRVQL 64
DB 1 IVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWLTAAACVGPDKDLAALRVQL 60
QY 65 REQHLVYQDQLPVSRILIVHPQFYTAQIGADIALLELEBPVNVSSHVTITLPPASETFP 124
DB 61 REQHLVYQDQLPVSRILIVHPQFYTAQIGADIALLELEBPVNVSSHVTITLPPASETFP 120
QY 125 PEMPCWVTGWDVNDERLPPPEPLKQVVPIMENHICDAKYLGAATGDDVRIVRDML 184
DB 121 PEMPCWVTGWDVNDERLPPPEPLKQVVPIMENHICDAKYLGAATGDDVRIVRDML 180
QY 185 CAGNTRDSCQDSDGGLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYTYLDMIHXY 244
DB 181 CAGNTRDSCQDSDGGLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYTYLDMIHXY 240
QY 245 VPKKP 249
DB 241 VPKKP 245
  
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Search completed: August 26, 2005, 12:29:17  
 Job time : 1.10016 secs

GenCore version 5.1.6  
 Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
 (without alignments)  
 6.180 Million cell updates/sec

Title: US-09-598-982C-39  
 Perfect score: 1396  
 Sequence: 1 LEKRIVGGGEAPRSKMPQV.....ITRVYTYLDMIHVYVKKP 249

Scoring table: BLOSUM62

Searched: 10 seqs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0

Maximum DB seq length: inf

Post-processing: Minimum Match 0%

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	1396	100.0	249 1 US-09-598-982C-39	Sequence 39, Appl
2	1390	99.6	249 1 US-09-598-982C-23	Sequence 23, Appl
3	1387	99.4	249 1 US-09-598-982C-41	Sequence 41, Appl
4	1387	99.4	249 1 US-09-598-982C-43	Sequence 43, Appl
5	1384	99.1	249 1 US-09-598-982C-9	Sequence 9, Appl
6	1381	98.9	249 1 US-09-598-982C-25	Sequence 25, Appl
7	1381	98.9	249 1 US-09-598-982C-27	Sequence 27, Appl
8	1380	98.9	249 1 US-09-598-982C-37	Sequence 37, Appl
9	1374	98.4	249 1 US-09-598-982C-21	Sequence 21, Appl
10	1365	97.8	245 1 US-09-598-982C-11	Sequence 11, Appl

## ALIGNMENTS

RESULT 1  
 US-09-598-982C-39  
 ; Sequence 39, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew  
 ; APPLICANT: Maffitt, Mark  
 ; APPLICANT: Haak-Frendscho, Mary  
 ; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 ; TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 ; FILE REFERENCE: 34506.104  
 ; CURRENT APPLICATION NUMBER: US/09/598,982C  
 ; CURRENT FILING DATE: 2000-06-21  
 ; PRIOR APPLICATION NUMBER: 09/079,970  
 ; PRIOR FILING DATE: 1998-04-15  
 ; NUMBER OF SEQ ID NOS: 52  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO: 39  
 ; LENGTH: 249  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-598-982C-39

Query Match 100.0%; Score 1396; DB 1; Length 249;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWLTAAACVGPDKDLAAL 60
DB 1 LEKRIVGGGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWLTAAACVGPDKDLAAL 60
QY 61 RVQLREQHLVYQDQLPVSRILIVHPQFYTAQIGADIALLELEBPVNVSSHVTITLPPAS 120
DB 61 RVQLREQHLVYQDQLPVSRILIVHPQFYTAQIGADIALLELEBPVNVSSHVTITLPPAS 120
QY 121 ETTPPGMPCWVTGWDVNDERLPPPEPLKQVVPIMENHICDAKYLGAATGDDVRIVR 180
DB 121 ETTPPGMPCWVTGWDVNDERLPPPEPLKQVVPIMENHICDAKYLGAATGDDVRIVR 180
QY 181 DDMLCAGNTRDSCQDSDGGLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYTYLDM 240
DB 181 DDMLCAGNTRDSCQDSDGGLVCKVNGTWLQAGVSWGSCAQPNNRPGIYTRVYTYLDM 240
QY 241 IHVYVKKP 249
DB 241 IHVYVKKP 249
  
```

RESULT 2  
 US-09-598-982C-23  
 ; Sequence 23, Application US/09598982C  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Niles, Andrew

APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 23  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-23

Query Match 99.6%; Score 1390; DB 1; Length 249;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPOWVLTAAHCVPDVKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPOWVLTAAHCVPDVKDLAAL 60  
QY 61 RVQLREQHLYYQDQLPVSRIIVHPQFTYAQIGAIALLLEBPVNVSSHVHTVTLPPAS 120  
DB 61 RVQLREQHLYYQDQLPVSRIIVHPQFTYAQIGAIALLLEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVPIEMENHICDAKYHGAATGDDVRLVR 180  
DB 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVPIEMENHICDAKYHGAATGDDVRLVR 180  
QY 181 DDMLCAGNTRRDSQCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDM 240  
DB 181 DDMLCAGNTRRDSQCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDM 240  
QY 241 IHHYVPPKP 249  
DB 241 IHHYVPPKP 249

RESULT 3  
US-09-598-982C-41

Sequence 41, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 41  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-41

Query Match 99.4%; Score 1387; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPOWVLTAAHCVPDVKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPOWVLTAAHCVPDVKDLAAL 60  
QY 61 RVQLREQHLYYQDQLPVSRIIVHPQFTYAQIGAIALLLEBPVNVSSHVHTVTLPPAS 120

DB 61 RVQLREQHLYYQDQLPVSRIIVHPQFTYAQIGAIALLLEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVPIEMENHICDAKYHGAATGDDVRLVR 180  
DB 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVPIEMENHICDAKYHGAATGDDVRLVR 180  
QY 181 DDMLCAGNTRRDSQCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDM 240  
DB 181 DDMLCAGNTRRDSQCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDM 240  
QY 241 IHHYVPPKP 249  
DB 241 IHHYVPPKP 249

RESULT 4  
US-09-598-982C-43

Sequence 43, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104  
CURRENT APPLICATION NUMBER: US/09/598,982C  
PRIOR FILING DATE: 2000-06-21  
PRIOR APPLICATION NUMBER: 09/079,970  
NUMBER OF SEQ ID NOS: 52  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 43  
LENGTH: 249  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-598-982C-43

Query Match 99.4%; Score 1387; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPOWVLTAAHCVPDVKDLAAL 60  
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMHFCCGSLIHPOWVLTAAHCVPDVKDLAAL 60  
QY 61 RVQLREQHLYYQDQLPVSRIIVHPQFTYAQIGAIALLLEBPVNVSSHVHTVTLPPAS 120  
DB 61 RVQLREQHLYYQDQLPVSRIIVHPQFTYAQIGAIALLLEBPVNVSSHVHTVTLPPAS 120  
QY 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVPIEMENHICDAKYHGAATGDDVRLVR 180  
DB 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVPIEMENHICDAKYHGAATGDDVRLVR 180  
QY 181 DDMLCAGNTRRDSQCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDM 240  
DB 181 DDMLCAGNTRRDSQCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDM 240  
QY 241 IHHYVPPKP 249  
DB 241 IHHYVPPKP 249

RESULT 5  
US-09-598-982C-9

Sequence 9, Application US/09598982C  
GENERAL INFORMATION:  
APPLICANT: Niles, Andrew  
APPLICANT: Maffitt, Mark  
APPLICANT: Haak-Frendescho, Mary  
TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
FILE REFERENCE: 34506.104

```

; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 9
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-9
```

```

Query Match      99.1%; Score 1384; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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QY 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVPDVKDLAAL 60
DB 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVPDVKDLAAL 60
QY 61 RVQLREOHLIYODQLLPVSRITIVHPQFYTAQIGALIALLEBEPVNVSSHHTVTLPPAS 120
DB 61 RVQLREOHLIYODQLLPVSRITIVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
QY 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
QY 181 DMMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWGEGCAQPNRPGITRYTYIYLDW 240
DB 181 DMMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWGEGCAQPNRPGITRYTYIYLDW 240
QY 241 IHHYVPKKP 249
DB 241 IHHYVPKKP 249

RESULT 6
US-09-598-982C-25
; Sequence 25, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 25
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-25
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```

Query Match      98.9%; Score 1381; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
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QY 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVPDVKDLAAL 60
DB 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVPDVKDLAAL 60
QY 61 RVQLREOHLIYODQLLPVSRITIVHPQFYTAQIGALIALLEBEPVNVSSHHTVTLPPAS 120
DB 61 RVQLREOHLIYODQLLPVSRITIVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
QY 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
```

```

DB 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
QY 181 DMMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWGEGCAQPNRPGITRYTYIYLDW 240
DB 181 DMMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWGEGCAQPNRPGITRYTYIYLDW 240
QY 241 IHHYVPKKP 249
DB 241 IHHYVPKKP 249
```

```

RESULT 7
US-09-598-982C-27
; Sequence 27, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 27
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-27
```

```

Query Match      98.9%; Score 1381; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
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```

QY 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVPDVKDLAAL 60
DB 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVPDVKDLAAL 60
QY 61 RVQLREOHLIYODQLLPVSRITIVHPQFYTAQIGALIALLEBEPVNVSSHHTVTLPPAS 120
DB 61 RVQLREOHLIYODQLLPVSRITIVHPQFYTAQIGADIALLEBEPVNVSSHHTVTLPPAS 120
QY 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
DB 121 ETFPFGMCWVTGMDVNDERLPPFPPLKQVKVPIMENHICDAKYHLGAYTGDDVRIYR 180
QY 181 DMMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWGEGCAQPNRPGITRYTYIYLDW 240
DB 181 DMMLCAGNTRRDS CGDSGGLVCKVNGTWTLOAGVSWGEGCAQPNRPGITRYTYIYLDW 240
QY 241 IHHYVPKKP 249
DB 241 IHHYVPKKP 249
```

```

RESULT 8
US-09-598-982C-37
; Sequence 37, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
```



SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 37  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-37

Query Match 98.4%; Score 1380; DB 1; Length 249;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 247; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 LEKRIYVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVDLAL 60  
DB 1 LEKRIYVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVDLAL 60  
QY 61 RYQLEQHLHYDQDLIPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVTTLPPAS 120  
DB 61 RYQLEQHLHYDQDLIPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVTTLPPAS 120  
QY 121 EFPFGMPCWVGWDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180  
DB 121 EFPFGMPCWVGWDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180  
QY 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYYLDW 240  
DB 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYYLDW 240  
QY 241 IHHYVPKKP 249  
DB 241 IHHYVPKKP 249

RESULT 9  
US-09-598-982C-21  
; Sequence 21, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 21  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-21

Query Match 98.4%; Score 1374; DB 1; Length 249;  
Best Local Similarity 98.8%; Pred. No. 0;  
Matches 246; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 LEKRIYVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVDLAL 60  
DB 1 LEKRIYVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVDLAL 60  
QY 61 RYQLEQHLHYDQDLIPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVTTLPPAS 120  
DB 61 RYQLEQHLHYDQDLIPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVTTLPPAS 120  
QY 121 EFPFGMPCWVGWDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180  
DB 121 EFPFGMPCWVGWDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180  
QY 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYYLDW 240  
DB 181 DDMLCAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYYLDW 240

QY 241 IHHYVPKKP 249  
DB 241 IHHYVPKKP 249

RESULT 10  
US-09-598-982C-11  
; Sequence 11, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendscho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 11  
; LENGTH: 245  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-11

Query Match 97.8%; Score 1365; DB 1; Length 245;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 243; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 IVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVDLALRVQL 64  
DB 1 IVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPQWVLTAAHCVGPDVDLALRVQL 60  
QY 65 REQHLHYDQDLIPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVTTLPPASETFP 124  
DB 65 REQHLHYDQDLIPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVTTLPPASETFP 120  
QY 125 PGMPCWVGWDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVRDML 184  
DB 125 PGMPCWVGWDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVRDML 180  
QY 185 CAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYYLDWIMHY 244  
DB 185 CAGNTRRDSGCGDSGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVTYYLDWIMHY 240  
QY 245 VPKKP 249  
DB 245 VPKKP 249

Search completed: August 26, 2005, 12:29:17  
Job time : 0.100161 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
(without alignments)  
6.180 Million cell updates/sec

Title: US-09-598-982C-41

Perfect score: 1398  
Sequence: 1 LEKRIYVGQGEAPRSKMPQV.....IYTRVTYYLDWIMHYVPKKP 249

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 10 seqs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	1398	100.0	249	1	US-09-598-982C-41
2	1398	100.0	249	1	US-09-598-982C-43
3	1392	99.6	249	1	US-09-598-982C-25
4	1392	99.6	249	1	US-09-598-982C-27
5	1389	99.4	249	1	US-09-598-982C-9
6	1387	99.2	249	1	US-09-598-982C-39
7	1385	99.1	249	1	US-09-598-982C-37
8	1381	98.8	249	1	US-09-598-982C-23
9	1379	98.6	249	1	US-09-598-982C-21
10	1370	98.0	245	1	US-09-598-982C-11

## ALIGNMENTS

## RESULT 1

US-09-598-982C-41  
; Sequence 41, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 41  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-41

Query Match 100.0%; Score 1398; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVGPVDYKDLAAL 60  
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVGPVDYKDLAAL 60  
QY 61 RVQLREOHLYYQDOLLPVSRITIVHPQFYTAQIGADIALLELEPPVNVSSHVTTLPPAS 120  
DB 61 RVQLREOHLYYQDOLLPVSRITIVHPQFYTAQIGADIALLELEPPVNVSSHVTTLPPAS 120  
QY 121 ETPFGMPCWYTGMDVNDERLPPFPPLKQVYPIEMNHICDAKYHLGAYTGDDVRLVR 180  
DB 121 ETPFGMPCWYTGMDVNDERLPPFPPLKQVYPIEMNHICDAKYHLGAYTGDDVRLVR 180

DB 121 ETPFGMPCWYTGMDVNDERLPPFPPLKQVYPIEMNHICDAKYHLGAYTGDDVRLVR 180  
QY 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWTLOAGVSVNGECGCAQPNRPGIYTRVTVYLDW 240  
DB 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWTLOAGVSVNGECGCAQPNRPGIYTRVTVYLDW 240  
QY 241 IHHYVKKP 249  
DB 241 IHHYVKKP 249

## RESULT 2

US-09-598-982C-43  
; Sequence 43, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 43  
; LENGTH: 249  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-598-982C-43

Query Match 100.0%; Score 1398; DB 1; Length 249;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVGPVDYKDLAAL 60  
DB 1 LEKRIVGGEAPRSKMPQVSLRVHGPYMHFCGSLIHPQWVLTAAHCVGPVDYKDLAAL 60  
QY 61 RVQLREOHLYYQDOLLPVSRITIVHPQFYTAQIGADIALLELEPPVNVSSHVTTLPPAS 120  
DB 61 RVQLREOHLYYQDOLLPVSRITIVHPQFYTAQIGADIALLELEPPVNVSSHVTTLPPAS 120  
QY 121 ETPFGMPCWYTGMDVNDERLPPFPPLKQVYPIEMNHICDAKYHLGAYTGDDVRLVR 180  
DB 121 ETPFGMPCWYTGMDVNDERLPPFPPLKQVYPIEMNHICDAKYHLGAYTGDDVRLVR 180  
QY 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWTLOAGVSVNGECGCAQPNRPGIYTRVTVYLDW 240  
DB 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWTLOAGVSVNGECGCAQPNRPGIYTRVTVYLDW 240  
QY 241 IHHYVKKP 249  
DB 241 IHHYVKKP 249

## RESULT 3

US-09-598-982C-25  
; Sequence 25, Application US/09598982C  
; GENERAL INFORMATION:  
; APPLICANT: Niles, Andrew  
; APPLICANT: Maffitt, Mark  
; APPLICANT: Haak-Frendescho, Mary  
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPSASES, ACTIVE SITE MUTANTS THEREOF,  
; FILE REFERENCE: 34506.104  
; CURRENT APPLICATION NUMBER: US/09/598,982C  
; CURRENT FILING DATE: 2000-06-21  
; PRIOR APPLICATION NUMBER: 09/079,970  
; PRIOR FILING DATE: 1998-04-15  
; NUMBER OF SEQ ID NOS: 52

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; SOFTWARE: Patentin version 3.3
; SEQ ID NO 25
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-25

```

```

Query Match      99.6%; Score 1392; DB 1; Length 249;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPOWVLTAAHCVGPDVVDLAL 60
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPOWVLTAAHCVGPDVVDLAL 60
QY 61 RVQLREOHLYYQDQLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPAS 120
DB 61 RVQLREOHLYYQDQLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPAS 120
QY 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180
DB 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180
QY 181 DDMLCAGNTRRDSCGDAGGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDW 240
DB 181 DDMLCAGNTRRDSCGDAGGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDW 240
QY 241 IHHYVPPKP 249
DB 241 IHHYVPPKP 249

```

```

RESULT 4
US-09-598-982C-27
; Sequence 27, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 27
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-27

```

```

Query Match      99.6%; Score 1392; DB 1; Length 249;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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```

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPOWVLTAAHCVGPDVVDLAL 60
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPOWVLTAAHCVGPDVVDLAL 60
QY 61 RVQLREOHLYYQDQLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPAS 120
DB 61 RVQLREOHLYYQDQLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPAS 120
QY 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180
DB 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180
QY 181 DDMLCAGNTRRDSCGDAGGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDW 240
DB 181 DDMLCAGNTRRDSCGDAGGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDW 240

```

```

QY 241 IHHYVPPKP 249
DB 241 IHHYVPPKP 249

```

```

RESULT 5
US-09-598-982C-9
; Sequence 9, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 9
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-9

```

```

Query Match      99.4%; Score 1389; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPOWVLTAAHCVGPDVVDLAL 60
DB 1 LEKRIVGQGEAPRSKMPQVSLRVHGPYWMHFCGSLIHPOWVLTAAHCVGPDVVDLAL 60
QY 61 RVQLREOHLYYQDQLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPAS 120
DB 61 RVQLREOHLYYQDQLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHVHTVTLPPAS 120
QY 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180
DB 121 ETFFPGMPCWVTGMDVNDERLPPFPPLKQVKVIMENHICDAKYHLGAYTGDDVRLVR 180
QY 181 DDMLCAGNTRRDSCGDAGGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDW 240
DB 181 DDMLCAGNTRRDSCGDAGGGLVCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVITYLDW 240
QY 241 IHHYVPPKP 249
DB 241 IHHYVPPKP 249

```

```

RESULT 6
US-09-598-982C-39
; Sequence 39, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 39
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens

```

US-09-598-982C-39

Query Match	99.2%	Score 1387	DB 1	Length 249
Best Local Similarity	99.2%	Pred. No. 0		
Matches 247	Conservative 1	Mismatches 1	Indels 0	Gaps 0

QY	1	LEKRIVGGQAPRPSKPMQVSLRVHGVYMHFGGSLIHPOWLTAAHCVGPVKOLAAH	60
Db	1	LEKRIVGGQAPRPSKPMQVSLRVHGVYMHFGGSLIHPOWLTAAHCVGPVKOLAAH	60
QY	61	RVQLREQHLYYYODLLFVSRILVHPOFYTAQIGADTALLEEPVNVSSHHTVTLPPAS	120
Db	61	RVQLREQHLYYYODLLFVSRILVHPOFYTAQIGADTALLEEPVNVSSHHTVTLPPAS	120
QY	121	ETEPPEGMPCWVTGWGVDVNDERLPPEPLQLQVYKPIEMENHICPAKHYLGATGDDVRIYR	180
Db	121	ETEPPEGMPCWVTGWGVDVNDERLPPEPLQLQVYKPIEMENHICPAKHYLGATGDDVRIYR	180
QY	181	DDMLCAGNTRRDSQQGDAGSPILVCXVNGTWLQAGVNVSWBGCAQPNRPGIYTRVITYYLDW	240
Db	181	DDMLCAGNTRRDSQQGDAGSPILVCXVNGTWLQAGVNVSWBGCAQPNRPGIYTRVITYYLDW	240
QY	241	IIHHVYPRKKP	249
Db	241	IIHHVYPRKKP	249

## RESULT 7

US-09-598-982C-37  
; Sequence 37, Application US/09598982C

```

? GENERAL INFORMATION:
? APPLICANT: Niles, Andrew
? APPLICANT: Maffitt, Mark
? APPLICANT: Haak-Prendscho, Mary
? TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF
? TITLE OF INVENTION: AND METHODS OF MAKING SAME
? FILE REFERENCE: 34506.104
? CURRENT APPLICATION NUMBER: US/09/598,982C
? CURRENT FILING DATE: 2000-06-21
? PRIOR APPLICATION NUMBER: 09/079,970
? PRIOR FILING DATE: 1998-04-15
? NUMBER OF SEQ ID NOS: 52
? SOFTWARE: PatentIn version 3.3
? SEQ ID NO 37
? LENGTH: 249
? TYPE: PRT
? ORGANISM: Homo sapiens
? OS-09-598-982C-37

```

Query Match	99.1%	Score 1385	DB 1	Length 249
Best Local Similarity	99.2%	Pred. No. 0		
Matches 247	Conservative	1	Mismatches 1	Indels 0
				Gaps 0

Qy	1	LEKRIYGGQAPRPSKMPWQVSLRVHGEYWNHFGGSLIHPOWLTAAHCSGPRVKDLAL	60
Db	1	LEKRIYGGQAPRPSKMPWQVSLRVHGEYWNHFGGSLIHQWLTAAACSGPRVKDLAL	60
Qy	61	RVQLREQHLYYQDQLLPVSRILYHPOFYTAQIADIALLELEPNAVSSHHTVTLLP	120
Db	61	RVQLREQHLYYQDQLLPVSRILYHPOFYTAQIADIALLELEPNAVSSHHTVTLLP	120
Qy	121	ETPRPGMPCWVTGMDVNDERLPRPRLQOVVPIPMENHICPAKHLAGYGGDDVRIAR	180
Db	121	ETPRPGMPCWVTGMDVNDERLPRPRLQOVVPIPMENHICPAKHLAGYGGDDVRIAR	180
Qy	181	DDMLCAGNTRRDSQGGDAGGRLVCYKNGTWLQAGVVSWEBCAQPNRPGIYRVTTYLLDM	240
Db	181	DDMLCAGNTRRDSQGGDAGGRLVCYKNGTWLQAGVVSWEBCAQPNRPGIYRVTTYLLDM	240
Qy	241	IHHYVPRKPP	249
Db	241	IHHYVPRKPP	249

RESULT 8  
US-09-598-982C-23

US-09-598-982C-23  
; Sequence 23, Application US/09598982C

```

? GENERAL INFORMATION:
? APPLICANT: Niles, Andrew
? APPLICANT: Maffitt, Mark
? APPLICANT: Haak-Frendscho, Mary
? TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF
? TITLE OF INVENTION: AND METHODS OF MAKING SAME
? FILE REFERENCE: 34506.104
? CURRENT APPLICATION NUMBER: US/09/598,982C
? CURRENT FILING DATE: 2000-06-21
? PRIOR APPLICATION NUMBER: 09/079,970
? PRIOR FILING DATE: 1998-04-15
? NUMBER OF SEQ ID NOS: 52
? SOFTWARE: PatentIn version 3.3
? SEQ ID NO 23
? LENGTH: 249
? TYPE: PRT
? ORGANISM: Homo sapiens
? IS-09-598-982C-23

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Query March	98.8%	Score 1381	DB 1	Length 249
Best Local Similarity	98.8%	Pred. No. 0		
Matches 246	Conservative 1	Mismatches 2	Indels 0	Gaps 0

[illegible]

RESULT 9  
US-09-598-982C-21

US-09-598-982C-21  
; Sequence 21, Application US/09598982C  
: GENERAL INFORMATION.

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? ORGANISM: Homo sapiens
? APPLICANT: Niles, Andrew
? APPLICANT: Matfili, Mark
? APPLICANT: Haak-Frendscho, Mary
? TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF
? TITLE OF INVENTION: AND METHODS OF MAKING SAME
? FILE REFERENCE: 34506.104
? CURRENT APPLICATION NUMBER: US/09/598,982C
? CURRENT FILING DATE: 2000-06-21
? PRIOR APPLICATION NUMBER: 09/079,970
? PRIOR FILING DATE: 1998-04-15
? NUMBER OF SEQ ID NOS: 52
? SOFTWARE: PatentIn version 3.3
? SEQ ID NO 21
? LENGTH: 249
? TYPE: PRT
? ORGANISM: Homo sapiens
? US-09-598-982C-21

```

Query Match	98.6%	Score 1379;	DB 1;	Length 249;
Best Local Similarity	98.8%	Pred. No. 0;		
Matches 246; Conservative	1;	Mismatches	2;	Indels 0; Gaps 0.

```

QY      1 LERKIVGGGEAPRSKMPQVSLRVHGPYMHFPCGSLIHPQWVLTAAHCVPDVKDLAAL 60
DB      1 LERKIVGGGEAPRSKMPQVSLRVHGPYMHFPCGSLIHPQWVLTAAHCVPDVKDLAAL 60
QY      61 RVOLREGLHYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVHTVTLPPAS 120
DB      61 RVOLREGLHYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVHTVTLPPAS 120
QY      121 ETPPGMPCWVTGWGDVNDERLPPFPFLKQVPIIMENHICDAKYHLGAYTGDDVRIVR 180
DB      121 ETPPGMPCWVTGWGDVNDERLPPFPFLKQVPIIMENHICDAKYHLGAYTGDDVRIVR 180
QY      181 DDMLCAGNTRRDSGCGDGGPLVCVKNGTWLAQGVSWGEGCAQPNRPGIYTRVYTLDM 240
DB      181 DDMLCAGNTRRDSGCGDGGPLVCVKNGTWLAQGVSWGEGCAQPNRPGIYTRVYTLDM 240
QY      241 IHHVYPKKP 249
DB      241 IHHVYPKKP 249

```

```

RESULT 10
US-09-598-982C-11
; Sequence 11, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 11
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-11

```

```

Query Match      98.0%; Score 1370; DB 1; Length 245;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 243; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      5 IVGGGEAPRSKMPQVSLRVHGPYMHFPCGSLIHPQWVLTAAHCVPDVKDLAALRVOL 64
DB      1 IVGGGEAPRSKMPQVSLRVHGPYMHFPCGSLIHPQWVLTAAHCVPDVKDLAALRVOL 60
QY      65 REOHLHYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVHTVTLPPASETFP 124
DB      61 REOHLHYODQLLPVSRITIVHPQFYTAQIGADIALLEBPVNVSSHVHTVTLPPASETFP 120
QY      125 PGMPCWVTGWGDVNDERLPPFPFLKQVPIIMENHICDAKYHLGAYTGDDVRIYRDML 184
DB      121 PGMPCWVTGWGDVNDERLPPFPFLKQVPIIMENHICDAKYHLGAYTGDDVRIYRDML 180
QY      185 CAGNTRRDSGCGDGGPLVCVKNGTWLAQGVSWGEGCAQPNRPGIYTRVYTLDMHHY 244
DB      181 CAGNTRRDSGCGDGGPLVCVKNGTWLAQGVSWGEGCAQPNRPGIYTRVYTLDMHHY 240
QY      245 VPKKP 249
DB      241 VPKKP 245

```

Search completed: August 26, 2005, 12:29:18  
Job time : 1.10016 secs

GenCore version 5.1.6

Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using bw model

Run on: August 26, 2005, 12:29:12 ; Search time 0.100161 Seconds  
(without alignments)  
6.180 Million cell updates/sec

Title: US-09-598-982C-43  
Perfect score: 1398  
Sequence: 1 LERKIVGGGEAPRSKMPQV.....ITYRVTYTLDMHHVYPKKP 249

Scoring table: BIOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 10 seqs, 2486 residues

Total number of hits satisfying chosen parameters: 10

Minimum DB seq length: 0  
Maximum DB seq length: inf

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 200 summaries

Database : US09598982C\_rev.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES			
Result No.	Score	Query Match Length DB	ID
1	1398	100.0	249 1 US-09-598-982C-41
2	1398	100.0	249 1 US-09-598-982C-43
3	1392	99.6	249 1 US-09-598-982C-25
4	1392	99.6	249 1 US-09-598-982C-27
5	1389	99.4	249 1 US-09-598-982C-9
6	1387	99.2	249 1 US-09-598-982C-39
7	1385	99.1	249 1 US-09-598-982C-37
8	1381	98.8	249 1 US-09-598-982C-23
9	1379	98.6	249 1 US-09-598-982C-21
10	1370	98.0	245 1 US-09-598-982C-11

#### ALIGNMENTS

```

RESULT 1
US-09-598-982C-41
; Sequence 41, Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffitt, Mark
; APPLICANT: Haak-Frendscho, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 41
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens

```

US-09-598-982C-41

Query Match 100.0%; Score 1398; DB 1; Length 249;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVPDVKDLAAL 60  
 DB 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVPDVKDLAAL 60  
 QY 61 RYQLEBQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVTTLPPAS 120  
 DB 61 RYQLEBQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVTTLPPAS 120  
 QY 121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQYKVPIMENHICDAKYHLAGAYTGDVRIYR 180  
 DB 121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQYKVPIMENHICDAKYHLAGAYTGDVRIYR 180  
 QY 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWLQAGVWSGEGCAOPNRPGIYTRVITYLDW 240  
 DB 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWLQAGVWSGEGCAOPNRPGIYTRVITYLDW 240  
 QY 241 IHHYVPKKP 249  
 DB 241 IHHYVPKKP 249

## RESULT 2

US-09-598-982C-43  
 Sequence 43, Application US/09598982C

GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendscho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 PRIOR FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO 43  
 LENGTH: 249  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-598-982C-43

Query Match 100.0%; Score 1398; DB 1; Length 249;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVPDVKDLAAL 60  
 DB 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVPDVKDLAAL 60  
 QY 61 RYQLEBQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVTTLPPAS 120  
 DB 61 RYQLEBQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVTTLPPAS 120  
 QY 121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQYKVPIMENHICDAKYHLAGAYTGDVRIYR 180  
 DB 121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQYKVPIMENHICDAKYHLAGAYTGDVRIYR 180  
 QY 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWLQAGVWSGEGCAOPNRPGIYTRVITYLDW 240  
 DB 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWLQAGVWSGEGCAOPNRPGIYTRVITYLDW 240  
 QY 241 IHHYVPKKP 249  
 DB 241 IHHYVPKKP 249

## RESULT 3

US-09-598-982C-25  
 Sequence 25, Application US/09598982C

GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendscho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 PRIOR FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO 25  
 LENGTH: 249  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-598-982C-25

Query Match 99.6%; Score 1392; DB 1; Length 249;  
 Best Local Similarity 99.6%; Pred. No. 0;  
 Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVPDVKDLAAL 60  
 DB 1 LEKRIYGGGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVPDVKDLAAL 60  
 QY 61 RYQLEBQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVTTLPPAS 120  
 DB 61 RYQLEBQHLYYQDQLPVSRIIVHPQFYTAQIGADIALLEBEPVNVSSHVTTLPPAS 120  
 QY 121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQYKVPIMENHICDAKYHLAGAYTGDVRIYR 180  
 DB 121 ETFFPGMPCWVTGWDVNDERLPPFPPLKQYKVPIMENHICDAKYHLAGAYTGDVRIYR 180  
 QY 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWLQAGVWSGEGCAOPNRPGIYTRVITYLDW 240  
 DB 181 DDMLCAGNTRRDS CGDAGGPLVCKVNGTWLQAGVWSGEGCAOPNRPGIYTRVITYLDW 240  
 QY 241 IHHYVPKKP 249  
 DB 241 IHHYVPKKP 249

## RESULT 4

US-09-598-982C-27  
 Sequence 27, Application US/09598982C

GENERAL INFORMATION:  
 APPLICANT: Niles, Andrew  
 APPLICANT: Maffitt, Mark  
 APPLICANT: Haak-Frendscho, Mary  
 TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,  
 TITLE OF INVENTION: AND METHODS OF MAKING SAME  
 FILE REFERENCE: 34506.104  
 CURRENT APPLICATION NUMBER: US/09/598,982C  
 PRIOR FILING DATE: 2000-06-21  
 PRIOR APPLICATION NUMBER: 09/079,970  
 PRIOR FILING DATE: 1998-04-15  
 NUMBER OF SEQ ID NOS: 52  
 SOFTWARE: PatentIn version 3.3  
 SEQ ID NO 27  
 LENGTH: 249  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-598-982C-27

Query Match 99.6%; Score 1392; DB 1; Length 249;  
 Best Local Similarity 99.6%; Pred. No. 0;  
 Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
QY      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
DB      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
QY      61 RVQLREQHLYYODQLLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHHTVTLPPAS 120
DB      61 RVQLREQHLYYODQLLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHHTVTLPPAS 120
QY      121 ETPPGMPCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIVR 180
DB      121 ETPPGMPCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIVR 180
QY      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWLQAGVSWGEGCAOPNRPGIYTRVYYLDM 240
DB      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWLQAGVSWGEGCAOPNRPGIYTRVYYLDM 240
QY      241 IHHYVPPKP 249
DB      241 IHHYVPPKP 249

RESULT 5
US-09-598-982C-9
; Sequence 9 Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendach, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 9
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-9

Query Match      99.4%; Score 1389; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
DB      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
QY      61 RVQLREQHLYYODQLLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHHTVTLPPAS 120
DB      61 RVQLREQHLYYODQLLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHHTVTLPPAS 120
QY      121 ETPPGMPCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIVR 180
DB      121 ETPPGMPCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIVR 180
QY      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWLQAGVSWGEGCAOPNRPGIYTRVYYLDM 240
DB      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWLQAGVSWGEGCAOPNRPGIYTRVYYLDM 240
QY      241 IHHYVPPKP 249
DB      241 IHHYVPPKP 249

RESULT 6
US-09-598-982C-39
; Sequence 39 Application US/09598982C
; GENERAL INFORMATION:
```

```
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendach, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 39
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-39

Query Match      99.2%; Score 1387; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
DB      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
QY      61 RVQLREQHLYYODQLLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHHTVTLPPAS 120
DB      61 RVQLREQHLYYODQLLPVSRITIVHPQFYTAQIGADIALLELEEPVNVSSHHTVTLPPAS 120
QY      121 ETPPGMPCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIVR 180
DB      121 ETPPGMPCWVTGWDVNDERLPPFPPLKQVKVPIIMENHICDAKYHLGAYTGDDVRIVR 180
QY      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWLQAGVSWGEGCAOPNRPGIYTRVYYLDM 240
DB      181 DDMLCAGNTRRDS CGDAGGGLVCKVNGTWLQAGVSWGEGCAOPNRPGIYTRVYYLDM 240
QY      241 IHHYVPPKP 249
DB      241 IHHYVPPKP 249

RESULT 7
US-09-598-982C-37
; Sequence 37 Application US/09598982C
; GENERAL INFORMATION:
; APPLICANT: Niles, Andrew
; APPLICANT: Maffett, Mark
; APPLICANT: Haak-Frendach, Mary
; TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
; TITLE OF INVENTION: AND METHODS OF MAKING SAME
; FILE REFERENCE: 34506.104
; CURRENT APPLICATION NUMBER: US/09/598,982C
; CURRENT FILING DATE: 2000-06-21
; PRIOR APPLICATION NUMBER: 09/079,970
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 37
; LENGTH: 249
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-598-982C-37

Query Match      99.1%; Score 1385; DB 1; Length 249;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 247; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
DB      1 LEKRIVGQGEAPRSKMPQVSLRVHGPYMMHFCGSLIHPQWVLTAAHCVGPDVKDLAAL 60
```



```

QY      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPAS 120
        |||
DB      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPAS 120
QY      121 ETPPPGMPGCVTWGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYR 180
        |||
DB      121 ETPPPGMPGCVTWGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYR 180
QY      181 DDMLCAGNTRRDSGCGDAGGPLYCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
        |||
DB      181 DDMLCAGNTRRDSGCGDAGGPLYCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
QY      241 IHHYVPKKP 249
        |||
DB      241 IHHYVPKKP 249

```

## RESULT 8

```

US-09-598-982C-23
/ Sequence 23, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Mafilt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 23
/ LENGTH: 249
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-598-982C-23

```

```

Query Match      98.8%; Score 1381; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 LEKRIYGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVXDIAL 60
        |||
DB      1 LEKRIYGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVXDIAL 60
QY      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPAS 120
        |||
DB      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPAS 120
QY      121 ETPPPGMPGCVTWGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYR 180
        |||
DB      121 ETPPPGMPGCVTWGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYR 180
QY      181 DDMLCAGNTRRDSGCGDAGGPLYCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
        |||
DB      181 DDMLCAGNTRRDSGCGDAGGPLYCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
QY      241 IHHYVPKKP 249
        |||
DB      241 IHHYVPKKP 249

```

## RESULT 9

```

US-09-598-982C-21
/ Sequence 21, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Mafilt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 21
/ LENGTH: 245
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-598-982C-11

```

```

/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 21
/ LENGTH: 249
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-598-982C-21

```

```

Query Match      98.6%; Score 1379; DB 1; Length 249;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 246; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 LEKRIYGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVXDIAL 60
        |||
DB      1 LEKRIYGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVXDIAL 60
QY      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPAS 120
        |||
DB      61 RVQLREQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPAS 120
QY      121 ETPPPGMPGCVTWGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYR 180
        |||
DB      121 ETPPPGMPGCVTWGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYR 180
QY      181 DDMLCAGNTRRDSGCGDAGGPLYCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
        |||
DB      181 DDMLCAGNTRRDSGCGDAGGPLYCKVNGTWLQAGVSWGEGCAQPNRPGIYTRVYYLDM 240
QY      241 IHHYVPKKP 249
        |||
DB      241 IHHYVPKKP 249

```

## RESULT 10

```

US-09-598-982C-11
/ Sequence 11, Application US/09598982C
/ GENERAL INFORMATION:
/ APPLICANT: Niles, Andrew
/ APPLICANT: Mafilt, Mark
/ APPLICANT: Haak-Frendscho, Mary
/ TITLE OF INVENTION: RECOMBINANT PROTEOLYTIC TRYPTASES, ACTIVE SITE MUTANTS THEREOF,
/ FILE REFERENCE: 34506.104
/ CURRENT APPLICATION NUMBER: US/09/598,982C
/ CURRENT FILING DATE: 2000-06-21
/ PRIOR APPLICATION NUMBER: 09/079,970
/ PRIOR FILING DATE: 1998-04-15
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 11
/ LENGTH: 245
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-598-982C-11

```

```

Query Match      98.0%; Score 1370; DB 1; Length 245;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 243; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      5 IVGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVXDIALRYQL 64
        |||
DB      1 IVGGQEARPSKMPQVSLRVHGPYMMHFCGSLIHPQVLTAAHCVGPDVXDIALRYQL 60
QY      65 REQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPASETFP 124
        |||
DB      61 REQHLYYQDQLLPVSRITIVHPQFYTAQIGADIALLELEBPVNVSSHVTTLPPASETFP 120
QY      125 PGMPCWTVGMDVNDERLPPFPPLKQVKVPIEMENHICDAKXHLGAYTGDDVRIYRDM 184
        |||

```



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K-Me-Vi-Dup-0